Lectures ON SYPHILITIC INOCULATION, AND ITS RELATIONS TO VACCINATION.

By HENRY LEE, Esq., F.R.C.S.,

HONORARY FELLOW OF KING'S COLLEGE, LONDON; LECTURER ON SURGICAL PATHOLOGY AT ST. GEORGE'S HOSPITAL.

LECTURE IX.

SYPHILITIC INOCULATION MODIFIED BY PREVIOUS DISEASE.

As the effects of the vaccine inoculation may wear themselves out, so that a patient, after the lapse of a certain time, may be revaccinated, so may the syphilitic poison after a time occasionally reproduce the genuine infecting chancre upon the same individual. But it continually happens that patients constitutionally syphilitic are exposed to fresh infection before the influence of the first disease has passed away. The inoculation may then succeed in a modified form. A pimple, a small tubercle, or an abortive pustule may result; but these will all want the characteristic symptoms of the originally infecting disease. These modified actions are also peculiar in not having the period of incubation which is natural to the original infecting sore. They commonly appear shortly after inoculation, and are likely to occur generally in proportion to the irritating nature of the discharge with which the poison is combined. Thus an indurated sore which does not furnish a secretion which would be inoculable upon a person who had already had syphilis, might, if artificially irritated, become inoculable; or a secondary affection, which is not communicable under ordinary circumstances, may, when producing or combined with an irritating secretion, become communicable. Cases of this nature are continually presenting themselves in practice. The affections which result differ from those which constitute ordinary forms of primary syphilitic infection, and they may safely be treated without mercury. The following cases illustrate this subject experimentally:—

CASE 1.—H. C—— came under my care at the Lock Hospital on the 2nd of February, 1854. She had a syphilitic eruption upon the skin, and several irritable sores upon the inner margins of the labia and perineum. The inguinal glands were enlarged and indurated.

Feb. 4th.—Several spots were inoculated from angry-looking sores on the margin of the anus and labia.

6th.—Several fresh inoculations were performed from other irritable sores.

11th.—Each point inoculated had produced a kind of pustule. Fresh inoculations were made with the secretion of the original sores, and with that of the artificial inoculations.

13th.—Upon each point last inoculated a vesicle had appeared.

14th.—The secretion of each vesicle had become turbid.

16th.—Fresh inoculations were performed from the sores, natural and artificial, which furnished the largest amount of secretion. Eighteen hours afterwards the inoculated spots were found to be slightly reddened.

18th.—Forty-four hours after the last inoculations no result was perceptible. Several fresh spots were inoculated with the secretion of the sores near the anus, and with that of the sores artificially produced.

22nd.—The last inoculations had produced no effect. The inoculations of the 11th were forming small dry scabs. The eruption had now faded.

24th.—Several spots were inoculated with as much secretion as could be obtained from any of the sores.

27th.—The inoculations last made had produced no effect.

March 2nd.—The sores, natural and artificial, had all healed. The patient was discharged as cured, having been under treatment exactly four weeks, and having apparently during the last two weeks not been susceptible of any further inoculation by means of the secretion derived from her own sores.

It was at first difficult to say why, in this case, some of the inoculations were capable of being reproduced, and some not; why those last made were of a different character from the first; and why the results of all the inoculations disappeared in so short a time.

These questions appear to derive a solution from the following two cases, which show that although an infecting sore is not capable of being inoculated under ordinary circumstances, yet the same sore will, under a state of irritation, produce an inoculable secretion, and that the effects of the inoculation of that secretion will vary according to the amount of irritation present at the time the secretion is produced.

CASE 2.—A lad was admitted into the Lock Hospital on the 29th of July, 1858. He had had gonorrhœa six months previously, but otherwise had been free from any venereal affection until about a fortnight before his admission. He then had a superficial sore behind the corona glandis, which healed in a few days. Two or three days after the first appearance of this sore, a little pimple appeared on the outer skin of the prepuce. This, on the 26th of July, presented all the appearances of a well-marked Hunterian chancre. It discharged from its surface a white turbid secretion. To a portion of this a drop of acetic acid was added, and it was examined by the microscope, and found to contain no pus globules.

July 27th.—The secretion was inoculated in several points on the patient's thigh.

29th.—This was the day the patient was admitted into the hospital. The secretion from the sore was again examined, and found to contain no pus.

31st.—Several fresh inoculations were made. The sore continued to increase in size.

Aug. 3rd.—None of the inoculations had succeeded. The glands at the back of the neck were now enlarged, and the skin presented an incipient syphilitic eruption. A small blister was applied to the surface of the sore.

5th.—A superficial slough had formed on the surface of the sore, which yielded in parts a puriform secretion. This was inoculated upon the thigh in several points.

7th.—The sore now again secreted no pus. Fresh inoculations were performed.

10th.—The sore was dressed twice yesterday with the sabine ointment, and now yields a copious secretion of pus. This purulent secretion was inoculated in several points on a different part of the thigh.

12th.—The inoculations last made had succeeded. The sore still yielded a copious secretion of pus.

14th.—The inoculations both of the 5th and 10th had now succeeded, but not those of the 7th. They presented the appearance of circular red patches, with some elevation and thickening of the cuticle. In one place there was the appearance of a vesicle, from which a serous fluid exuded. This fluid was again inoculated upon the patient's thigh. The original sore, which had been dressed with water, now again yielded no pus.

17th.—The inoculation from the inoculation had succeeded. It presented the appearance of a red circular patch, with slight thickening of the skin, from which the cuticle was abraded. It had not in the least assumed the appearance of a pustule, nor was anything like pus secreted from its surface. A single pustule, surrounded by very little inflammation, had, however, formed in one of the points first inoculated.

19th.—The inoculations appeared as separate red patches on the skin, which, in these situations, was slightly raised and thickened, but no induration extended into its substance. The solitary pustule which appeared had dried up.

24th.—One of the inoculations first made had a slight tendency to ulcerate; the others were desquamating and losing their colour.

CASE 3.—Bridget C——, aged seventeen, was admitted into the Lock Hospital on the 26th of August, 1858. She had suffered from a thick yellow discharge between two and three months. This was followed, in the course of as many weeks, by the appearance of two small places on the upper part of the left thigh. These, upon her admission, presented all the characters of well marked primary indurated chancres in a state of progress. The surfaces of these sores were covered by a scanty tenacious secretion, in small quantity, which, upon microscopic examination, yielded no pus. This secretion was carefully inoculated upon the patient's thigh.

Aug. 28th.—The inoculation was repeated. There was at this time no indication of the sores having any tendency to heal.

31st.—No result from the inoculations. The two sores had now been dressed for two days with the sabine ointment, and

yielded an abundant secretion, distinctly purulent. The secretion from each sore was inoculated in several points close together in two separate places in the thigh.

Sept. 2nd.—The inoculations last made have produced the appearance of small incipient pustules in both situations. The secretion from one of these was inoculated in two or three points on the thigh lower down.

4th.—The inoculations from the inoculations had apparently succeeded. One of the inoculations of the 31st of August had produced a small pustule. The others had produced only vesicles. The skin over one of these was broken.

9th.—The inoculations from the inoculations, performed on the 2nd of September, have dried up. The inoculations first in order of the 31st of August had entirely lost their puriform character. They now appeared as circular patches, yielding a serous secretion, mixed with epithelial scales. The original chancres were now in process of healing.

11th.—The inoculations first in order were desquamating, and of a light-red colour. The inoculations from the inoculations appeared as small red pimples, which were gradually losing their colour.

17th.—The original chancres were cicatrized. The inoculations were fading and desquamating.

23rd.—The inoculations from the inoculations were still visible, and appeared as shining scales of discoloured epithelium.

25th.—A few faint secondary spots appeared on the body. The original sores were quite healed, leaving slight induration. The corresponding glands in the groin were still enlarged and hard.

Oct. 4th.—This patient now left the hospital, but again presented herself on the 8th. The inoculations appeared as brown spots, the colour of which gradually faded into that of the surrounding skin.

It is quite possible that the persistence of the inoculations and their peculiar colour in the two last-recited cases may have depended upon the syphilitic diathesis of the patients. But this in no way militates against the fact that inoculations succeeded at one time, while they failed at another, under precisely the same conditions of the general system.

In Case 1, the inoculations succeeded so long only as the sores furnishing the secretion maintained their irritable character, and failed as soon as this irritability subsided.

In Cases 2 and 3, the sores, the natural secretion of which could not be inoculated with the lancet upon the patient, furnished an inoculable secretion when artificially irritat d.

In all the inoculations above recorded the effects appear to have been in direct relation to the amount of irritation present, and generally in proportion to the puriform condition of the secretion inoculated. It might be supposed that in the first case the sores ceased to be inoculable because they were in a healing condition, but this would not account for the inoculations produced from them ceasing to afford an inoculable secretion within four or five days of their first appearance. The inoculation, then, of the secretion of a sore affected with specific adhesive inflammation may take place, but is not easily performed, when once the patient's system has been affected with syphilis. When successful, the results are very different from those which follow the inoculation of the secretion from naturally suppurating sores. In the latter case each puncture produces a pustule, which by repeated inoculation will produce its like a great number of times. In the former the inoculation as a rule fails, and succeeds only under circumstances of accidental irritation. It then can be repeated a very limited number of times; and the results obtained, even by a number of punctures in one situation, are comparatively of a trifling description.

There is one circumstance which requires to be noted in connexion with this modified form of inoculation, and which, unless duly understood, might sometimes lead to an erroneous diagnosis. It will occasionally happen that a patient, previously syphilitic, will become inoculated again in a modified form, and upon the point thus inoculated a secondary effusion of plastic material, dependent upon the original disease, may occur. The irritation produced by the modified inoculation will then become surrounded by a certain amount of induration, and this affection might easily be mistaken for a primary infecting ulcer. Again, it will sometimes happen that a secondary induration will occur upon the prepuce, and upon this induration (occurring in consequence of a previous infection) an abrasion may occur, or the part may ulcerate spontaneously. The appearances then produced are very similar to those which accompany the primary infection, and they are here particularly noted in order that these different diseases may not be mistaken for each other.

CASE.—M. H——, aged eighteen, had previously suffered from syphilis. She was inoculated with the secretion of a specific pustule, which had previously been irritated by the application of the sabine ointment, and in another place she was inoculated with the secretion from an ecthymatous pustule in its natural condition. On the third day the first inoculation appeared to have taken; but on the eighth the appearances had faded. At the expiration of five weeks there was a slight accurately defined induration around the second inoculation.

CASE.—A woman, who from her previous mode of life had every chance of becoming syphilitic, was inoculated with the secretion from an infecting sore. A pimple followed the inoculation. At the expiration of a month the pimple was still there, and was surrounded by a faint-brown, copper-coloured eruption. These spots occupied a diameter of about six inches, and faded ultimately of their own accord. No other local or constitutional affection appeared as the result of the inoculation.

A modified syphilitic eruption, confined to the neighbourhood of a second inoculation on a patient previously syphilitic, is not uncommon. It is not unfrequently observed in women of the lower class. A syphilitic affection, presenting the distinctive characters of the primary infecting sore, more or less modified, will appear perhaps on some portion of the skin, and after a comparatively short interval an eruption will appear, confined to within a few inches of the modified inoculation. Any general mercurial influence is scarcely required for such affections.

After writing the above, I had the opportunity of seeing a most able and valuable paper in the last number of the *Archives de Médecine* for July, by Dr. Diday. In that article Dr. Diday has collected from his personal observation and from the records of other observers a considerable number of cases of well-marked secondary infection having occurred in patients who were previously syphilitic. One of the most interesting of these cases is from the pen of Mr. de Méric, and is worthy of the most careful consideration. The following case, corresponding to those which have been carefully collected and related with so much point by Dr. Diday, occurred in my own practice, and is related in the *Medico-Chirurgical Review* for January, 1854:—

A gentleman had a syphilitic sore which was followed by a general eruption on the skin. He then passed two years in the West Indies. After this he returned home, with the faint brown stains of the eruption still visible. In London he contracted fresh disease. Two well formed indurated and circular chancres presented themselves on the glans penis. In a few weeks these were followed by a well-marked crop of syphilitic lepra, of a bright copper colour, and quite distinct in appearance from the brown stains of the first eruption.

In the cases recorded by Dr. Diday, the second infection was not accompanied by specific enlargement of the inguinal glands, but something like the usual period of incubation existed between the application of the poison and the appearance of the symptoms. There can now be no doubt that a patient's constitution may so far become free from the consequences of a syphilitic infection that, in exceptional cases, he may become infected a second time, and that the fresh infection may then run its natural course much in the same way as if no previous disease had existed; such cases, however, are very rare. In general, if a second infection occurs, it is in a modified form; and if it should be followed by any constitutional symptoms, these present themselves also in a very mild manner.

In patients whose constitutions are under the influence of syphilis the period of incubation of a second infection is comparatively short. It is true that a patient's system may so far have recovered from the first infection, that, as in Dr. Diday's cases above referred to, the natural period of incubation, as well as the other distinctive symptoms of syphilitic infection, may appear a second time. While the patient's system, however, is under the influence of the first disease, the period of incubation of a second inoculation is short.

CASE.—A medical student became diseased for the first time in the year 1856. As soon as the sore appeared, and before it had become indurated, he inoculated some of the secretion on his own thigh. I saw him three or four days afterwards. There were then signs of irritation on the inoculated spot. This spot soon became converted into a small, hard, button-shaped sore, and then accurately resembled that from which the inoculated secretion had been taken. A small quantity of white lymph was at first visible in the inoculation, but both sores subsequently remained as small, hard, circular indurations, and furnished scarcely any secretion from their surfaces.

It would appear, then, from all the cases and experiments recorded—

1. That after a first infection, and before the induration has appeared, a patient is susceptible of being inoculated again from the same or from another source.

2. That after the induration has appeared he is no longer capable of being inoculated with the infecting variety of the disease, except in cases where the inoculated matter is derived from a part which has been subject to considerable irritation, and that even then the inoculations produce comparatively little effect, and are not followed by any additional constitutional symptoms.

3. That after a certain time the effects of the first infection may, in a great measure, subside, and that then a modified form of inoculation may take place, which may be followed by fresh constitutional disease; but that this also, when it does occur, appears usually in a very modified form.

4. That according to Dr. Diday this second infection is not likely to be accompanied by enlargement of the inguinal glands.

5. That the period of incubation of the second infection varies in inverse proportion to the degree in which the constitution is at the time influenced by previous disease.

*** This Lecture concludes the present series. We have received intimation that Mr. Lee's Lectures, as published in THE LANCET, are being translated into German and French. As some of these Lectures have already appeared in the *Spitals-Zeitung* without any acknowledgment of the source whence they are derived, we have to request that any future translation from the pages of THE LANCET may be properly acknowledged.—ED. L.

Clinical Lecture
ON
PLEURISY.

Delivered at St. Mary's Hospital, July 5th, 1862,

BY THOS. K. CHAMBERS, M.D.,

PHYSICIAN TO THE HOSPITAL, AND LECTURER ON SYSTEMATIC AND ON CLINICAL MEDICINE AT ST. MARY'S MEDICAL SCHOOL.

THOMAS G——, a day labourer, aged twenty-nine, was admitted June 19th, with anasarca of legs and belly of a fortnight's duration, and albuminous urine, which he attributed to exposure to the weather. The house-surgeon gave him a vapour-bath, a jalap purge, and some draughts of nitric ether and digitalis. When I saw him next day (June 20th) he complained of sharp pain on both sides of the waist, which he said had been coming on two days and was getting worse. On examination I found a pleuritic friction-sound beneath both scapulæ and in the lateral regions, but the normal respiratory murmur was still to be heard in spite of it. The friction-sound was a leathery creak, lasting through the whole of inspiration and the latter part of expiration. The tongue was furred, and there was thirst. He was ordered to be cupped; but as the instruments had unfortunately gone to be mended, and would not return for an hour or two, a dozen leeches were applied along the lower edges of the ribs in the infra-scapular region. Immediately they came off, a large poultice was placed all over the back of the chest.

The next day (June 21st) the pain and fever were quite gone, the friction sound was heard over only a limited space, and on the 22nd was departed altogether. The poultice was continued one more day, as the patient remained in the hospital to be treated for albuminuria.

Pure fibrinous inflammation of the pleura, usually called Pleurisy, without any affection of the pulmonary tissue, you do not often have an opportunity of seeing in the hospital wards. But you know, from your experience of post-mortem examinations, how common it must be. There are few even of the most healthy chests in which you do not see old adhesions of the pleuritic surfaces, the relics of pleurisy—sometimes in one part, sometimes in another—sometimes partial, sometimes universal,—but so common, that they were supposed to be the normal condition of the part when morbid anatomy began first to be studied. What is the reason, then, that you have so few opportunities of learning how to treat this so common disease while you are *in statu pupillari?* Simply because it is scarcely ever so severe as to bring the patient into our hospital wards, so that your only chance of observing it is when it is joined with some more alarming disorder. The man who is the occasion of these remarks would never have been admitted here had he not been taken dropsical at the same time as he caught his pleurisy.

Ninety-nine times out of a hundred, pure pleurisy begins and ends with a catching pain in the side on inspiration, and a slight inflammatory fever; making the patient coddle at home and take slops, but not employ a doctor. It would, however, be much better for him if he did, for sometimes the illness may turn out a more serious affair, and always the pain in the side and the fever may be shortened by good management and lengthened by bad.

For example: Blisters at the commencement of pleurisy invariably protract the duration of the inflammation, and make it more severe. The property of cantharides is to cause and augment that very fibrinous state from which the membrane is already suffering. Exposure to cold, and to changes of temperature by baths and the like, makes it worse, as do strained postures of the body and exercise. Opiates also cover up the evil with an anæsthetic mask, and prevent the patient knowing how he really is. Mercury, again, is an unnecessary call upon the whole system to make destructive sacrifices for the sake of a very small and not important member. Purgatives do no good, and expose the patient to catch cold at the watercloset.

On the other hand, the treatment you saw applied gives decided and immediate relief and prevents the danger of the disease continuing.

It is necessary, however, to remark, that the whole of it was not directed to the pleura; the vapour-bath, the diaphoretic draughts, and the jalap were intended to relieve the anasarca of the skin, and were successful in so doing; while the treatment to which I specially design to call your attention as that appropriate for pleurisy, is the application of leeches and the poultice.

The object of leeching and all local bloodletting is to relieve that inflammatory congestion, which is not only itself an evidence of loss of vital power in the local bloodvessels, but is also the cause of further loss of vital power by leading to the other steps of the inflammatory process. The bloodvessels are unable to empty themselves with their usual elasticity, so you roughly take the place of vital power and empty them artificially. You may perhaps say, that is all very well in external inflammations, when you can directly draw off the blood which is causing the "rubor" and "tumor" visible to the naked eye, but you may doubt how the pleura, especially the pulmonary pleura, is to be affected by depleting the capillaries of the skin. It is such a long way round before you can find any vascular connexion between the parts, that you may suggest that local bloodletting is only beneficial by detracting so much blood, and that a small venesection would be more convenient and equally effectual. Now, it is not at all necessary to have a vascular connexion between separate parts for altered states and conditions of life to be propagated from one to another. I have seen in the dead body a round, circumscribed spot of costal pleura affected with fibrinous inflammation, and this had spread—not to the adjoining surface of serous membrane—not to that tissue intimately one with it in vascular connexion—but to the opposite surface of the lung, between which and its substance lay the great gulf of the pleural cavity,—the great gulf, anatomically speaking, but not physiologically, as proved by this instance. Now, if this gulf can be spanned by disease—the negation, the deficiency of life,—shall it not be yet easier stepped across by the remedy, the renewer of life? I do not myself feel any hesitation in believing firmly what experience seems to teach, that in inflammations of serous sacs depletion applied to the external surface has a power proportionate, not to the quantity of blood taken, but to the locality.

I have called the local detraction of blood a "renewer of life," and I think it is but fair to explain in what meaning I so speak of it. Doubtless the taking away the vital fluid is taking away part of the body, and so is directly a destructive agent. But then blood thus lost from an inflamed part is not all loss it is black, "melanosed," partially dead and unfitted for the purposes of life, and only a portion of it can really be called living. Then, again, granting that loss of blood is a direct loss

to a living body, still the indirect gain is a full compensation to cases where it is rightly applied. The bloodvessels resume their elastic force, the blood-stream is restored, and loss of substance is a regaining of function; so that a destructive becomes in the end a constructive remedy.

In the action of poultices there is no even seeming paradox to stumble at. Continuous steady warmth is the most direct agent we possess of vital development. It not merely encourages vital growth, but makes that growth take a higher form of life. Mr. Higginbottom found that different detachments of tadpoles, kept in the dark, and treated with different degrees of temperature, threw off their tails and branchiæ, and developed lungs and became frogs, with a quickness exactly proportioned to the warmth they were subjected to.* Warmth, especially when kept steady and even by moisture joined with it, has the same effect on the failing life of tissues in the higher animals. It raises and restores it to its normal force of development. It renews the injured membrane, which had been lowered to that condition we call congestion or inflammation, into the higher life of warm blooded circulation. As it developed the tadpole into the frog, so it developes the half-killed diseased part into full life.

But you must take care not to follow up the application of invigorating warmth by the depressing influence of cold, or it becomes doubly depressing by contrast. Your poultice must be kept on hot and hot till all pain has gone, and the breath can be drawn quite freely and easily. And it will do no harm to induce your patient to retain it even a little longer, as was done in this case. Such means will not fail to cut short an attack of pure pleurisy.

But you will say, there are cases of pleurisy which are *not* cut short; and notably just now there is one a few beds off the last patient, whose case I will extract from the case-book:—

John C——, aged thirty-four, navigator, always enjoyed good health till six months ago, when on the third day after lying in a damp bed he was seized with a violent sudden pain in the right side, which obliged him to take to his bed. He was in bed a fortnight, and was treated with mustard plasters. He coughed up a good deal of frothy sputa, and was a little delirious several nights. The pain then left the right side and settled in the left, but did not prevent his getting to work again a month after the first attack. His work has not been hard, and he has continued at it, with an occasional day's exception, till he was admitted June 25th. The principal trouble he has had, and the cause of his being off work sometimes, has been dyspnœa. He has pain on bending forward and on drawing a deep breath.

On examination of the chest in a sitting posture, there is very absolute dulness of the lower half of the lateral and scapular and of the whole infra-scapular region on the left side. The rest of the thorax is resonant. When he lies on his belly and puts the shoulders below the level of the chest, hanging his arms and head down, this infra-scapular region becomes more but not quite resonant, showing that the course of the dulness is, in part at least, due to fluid which moves about by the force of gravity. Still some dulness remains, and there is a whiffing sound with inspiration and expiration; and in the lateral region the dulness remains unaltered by any position.

The pathological history of the case appears to me this: that the man was attacked with double pleurisy, worse apparently on the right side than the left; that the treatment relieved it; but that the left side being the least attended to, the inflammation spread to the pulmonary tissue, and caused its insidious condensation. The cause of the dulness on percussion is partly fluid, which is affected by gravitation—partly solidified lung, which is not so altered in its position. The fluid in the pleura and the condensed pulmonary tissue have mutually kept one another from being restored to life.

Such is the most ordinary cause of long cases of pleurisy made chronic. The longer they have lasted, usually the more obstinate they are in yielding.

As respects treatment, you will find on the card the following, which may be considered as the "*processus integer*," as Sydenham calls it, of such cases:—

June 25th.—Empl. cantharides (6' pollices) lateri.
℞ Misturæ potassæ nitratis, ℥i.
Tinctæ. ferri sesquichloridi, ♏xv.
Ter die.

℞ Pilulæ hydrargyri,
Scillæ,
Pulveris digitalis, aa gr. iss.
Omni nocte et mane.

You will observe that the drugging is a union of destruction and construction, so as to try and alter as far as possible the whole habit of the system—to cause by destruction a demand for new material, the supply of which is guaranteed by the iron. The mercury causes a general increase of metamorphosis, the waste from which is directed to the kidneys by the squill and nitre. The digitalis tends to relieve congestion by increasing the activity and tone of the blood-stream. So that by a union of virtues, the combination prescribed in the pills will rarely fail to prove a powerful diuretic. The blister which has been put on the side will probably have to be repeated once, and perhaps again. You will observe, however, that I shall leave a considerable interval between each blister. I shall not apply first one on the side, then one on the scapula, then one beneath the collar-bone, stroke upon stroke, one as fast as the other comes off. This is not an uncommon practice, and the object of it is to save time, to get the two or three blisters which have to be put on over as soon as possible. I do not myself adopt it, and I will tell you why, as the reasons give a very good example of the restorative system of medicine which is intended to be taught in this course of lectures.

The action of vesicants is first to destroy the epidermis, and to cause the exudation of a fibrinous serum beneath it. Very probably a similar but more remote effect is produced on the neighbouring tissue of the pleural sac. But it is not at this stage of the process that the chief benefit occurs. If you watch carefully the line of dulness marking the upper margin of the collection of fluid in the chest, you will find that it falls—not when the blistered skin is full of liquid, and is discharging serum—not when the counter-irritation may be concluded to be at its height—but after it is all over. As the sore heals, then the level goes down with the greatest quickness. That is to say that the true use of blisters in such cases is to start a healing process, a renewed life, on the outside skin, in order that it may be propagated to the neighbouring viscus inside. As long as this healing influence continues to be exerted, you would gain no time by a recommencement of the process, and your too hurried repetition of blisters would add to the patient's distress, without conducing to his cure. Wait, then, till the effect of one blister has quite gone off before you order another.

Another case of pleurisy which has occurred this week I do not cite as possessing any interest in a therapeutical point of view, for it was rather an instance of the weakness of our art.

Charles D——, aged eight, was admitted on June 24th, with pyæmia after scarlet fever affecting the principal joints, and an incipient slough on the sacrum. On July 1st he died. At the request of the parents, the curator cut into one only of the joints, which was tense with creamy pus. On opening the chest, serum filled with flakes of fibrin gushed out from the right pleura. Bands of soft, elastic, straw-coloured fibrin, of an inch in length, united the opposite sides of the whole pleura, and coated the surfaces with a honeycombed layer. The lung was pressed back against the spine, was non-crepitant, inelastic, and tough. Now the front of this boy's chest had been examined on the day of admission by myself, the house surgeon, and the clinical clerk, and I cannot but feel sure that had pleurisy existed there at that period we should have found it out. Afterwards, the wailings of the poor child at the idea of being touched became so piteous, and the torture of moving the arms would probably have been so great, that an examination to discover the cause of the pain he complained of in the side was out of the question. The day, then, when the pleurisy came on is unknown, but it must have been less than a week before decease. What an amount of disorganization to have happened in such a short time! What a quantity of serum and fibrin to be formed! What a destruction of pulmonary tissue in consequence! Pyæmia is certainly the most furiously destructive of idiopathic poisons; but yet, before seeing it, one would scarcely believe the swiftness of its action to be so great.

The moral is: If the march of death is so hasty, let there be no delay in your remedies. Apply your cupping, or leeching, or *faute de mieux* venesection, your bedding and your poultices, your slops and your diuretics, without losing a minute. Do not hesitate, and trust patients to Nature, in any disease; but least of all in acute pleurisy.

* 20 tadpoles placed in a dark cellar at 56°, produced in 89 days 10 frogs.
" " " 53° " 103 " 10 "
" " " 51° " 131 " 8 "
Proceedings of the Royal Society (1862), vol. xi, No. 46, p. 332.

DYSPEPSIA.—A French writer calls dyspepsia "the remorse of a guilty stomach."

SOME FURTHER OBSERVATIONS ON THE OPERATION FOR THE DIVISION OF THE CILIARY MUSCLE.

BY HENRY HANCOCK, F.R.C.S.,
SENIOR SURGEON TO THE ROYAL WESTMINSTER OPHTHALMIC AND CHARING-CROSS HOSPITALS.

(*Concluded from p. 252.*)

CASE 19. *Amaurosis, traumatic.*—Mr. G——, whilst residing in India, was in the year 1852 struck over the right eye with the but-end of a riding-whip, and cut very severely. About twelve months after that he had inflammation of both eyes brought on by reading for press at night, which his vocation—that of manager of a newspaper—required. When the inflammation subsided, he found he could not see with his right eye, being only able to distinguish light from darkness. He had advice from several medical men on the spot, but derived no benefit. He therefore determined to get on as well as he could till an opportunity occurred of coming to Europe. He had been in the upper provinces of India from the year 1846 to 1860, and of late years has continually been subject to a heavy, oppressive feeling over the right eye, and at times both eyes seemed to be affected, from which he experienced relief by cold applications and rest.

He first applied to me on October 25th, 1861. He was at that time suffering from the oppressive pain over the right eye, the pupil of which was dilated, the iris acting sluggishly. He could distinguish light from darkness, but not objects, and was unable to read a letter with that eye. The ophthalmoscopic appearances were those of an old and considerable congestion of choroid and re ina.

Oct. 27th.—I divided the ciliary muscle. He described the operation as painless, and said he suffered no pain afterwards. At the end of a week, when the bandages were removed, the eye was free from pain and inflammation; the pupil had returned to its natural size, and he said the sight of the eye was clearer.

On the 12th December, 1861, he wrote as follows—"The operation was without pain, and I fancy has been of considerable benefit to me, though I cannot say as yet that I have quite recovered the sight of my right eye. I can see in a strong light, but the eye does not seem to possess the refracting power that it ought to. My general sight, however, is improved since the operation."

March 24th.—I again saw Mr. G——. He said that the sight of the right eye was decidedly better and stronger, and that he was able to read the large type of a newspaper with the right eye. With that eye, when with me, he read No. 8 of the test type at a distance of seven inches.

CASE 20. *Chronic atrophy of choroid and retina; blindness; division of ciliary muscle; cure.*—J. Y——, farm servant, aged fifty-two, admitted July 2nd, 1862. States that the right eye has been bad for thirty years. Has not suffered pain, but can only see on the outer side of the eye, not in front, and only light, not objects. He cannot account for the loss of sight; has always had good health, except one attack of ague. The sight of the left eye was pretty good until the previous September, when dimness came on, with muscæ and flashes of fire. When admitted he could not distinguish objects, and had not been able to do so since Christmas, at which time he was employed in draining land; but his sight was so defective that when he left off at any time he was obliged to feel where the trench was at which he was working, for he could not see it. He was then obliged to give up work altogether.

Ophthalmic examination (made by Mr. Hogg).—The lens of left eye quite opaque. In the right eye, evidences of old effusion; striæ both in retina and vitreous, probably due to an apoplexy of retinal capillaries; the vessels of the retina and choroid are atrophied; there are exposed patches of sclerotica, especially on the inner side of the optic nerve, and patches of pigment distributed over the fundus.

July 18th.—I divided the ciliary muscle of the right eye.

23rd.—The patient says he has not seen so well for twenty years; and that the operation was not painful, nor followed by any pain of consequence. He can see the figures on a watch. Mr. Ward of Epsom, who saw this patient with me to-day, in order to test his improvement stood directly in front of him, and, without speaking, winked his eye at him. He immediately told him what he was doing, and that he could see him distinctly.

CASE 21. *Irido-choroiditis.*—C. M——, a labourer from the country, admitted April 16th, 1862. The account given was as follows:—Two years and three months ago he lost the sight of the right eye. Fifteen months since the left eye became affected, first with numerous dazzling sparks, which, after a short time, were replaced by black spots and a cloud floating before the eye; then a dense fog, which during the last few weeks has gradually become more dense, so that when led to the hospital, he could only faintly perceive large bodies before him. The loss of vision has been accompanied by a good deal of pain of a lancinating character.

The ophthalmoscope discloses a considerable number of large turgid vessels; turbid, vitreous, and a few pupillary adhesions; eye prominent; iris bulging forward; the pupil of the right eye is nearly occluded by adhesions, and the lens apparently much implicated.

Mr. Hogg divided the ciliary muscle in both eyes. No unfavourable symptom appeared, and on the 26th he could read No. 14 test type with the left eye. There was much less prominence of globe, and the vessels were nearly normal; all pain had subsided.

The man continued to improve, and in a few days after left the hospital, being then able to read a letter.

Several cases of irido-choroiditis, differing slightly in character and urgency of symptoms, have been treated by division of the ciliary muscle at this hospital, which have been followed by equally good results to that given above.

CASE 22. *Irido-choroiditis.*—The following is the sequel of the case of Miss H. F—— (Case 15), reported in THE LANCET, vol. ii. 1860, p. 383, furnished by my friend Mr. Whitney, of Great College-street, Westminster:—Soon after the last report (Sept. 5th, 1860), the state of the left eye became less satisfactory; and this was soon followed by a positive increase of inflammation in consequence of a little child accidentally thrusting its finger against the cornea. From this time vision rapidly failed, the pupil became more and more irregular, insensible to the action of light, and apparently occupied with fragments of pigmentary matter. Various remedies were tried without effect. At this time she was unable to walk about without assistance. On October 20th, Mr. Bowman was consulted. He thought badly of the case, but recommended "iridectomy" as the only chance of benefiting the eye. Iridectomy, however, was not performed; but from this period, and without any medical interference, the eye began to improve, and so continued during the greater part of November, through December, till Christmas, when the power of vision was so much better that the patient not only recovered sight enough to move about by herself, but could read ordinary type, and see figures on her watch. On Jan. 21st, 1861, the patient, who for a long period had been the subject of hæmorrhoids (with occasional and considerable losses of blood), had these removed by operation. At this date (March 6th) she is able to read the smallest type; the pupil is nearly circular, contracts readily under the stimulus of light; and there is now no trace of deposit. She bears exposure to light without distress, and describes the eye as "feeling much stronger."

At the beginning of this present year she (Miss F——) had another attack in the left eye, which resisted all the usual remedies. She suffered so much, and the sight of the eye was so much impaired, that we determined to divide the ciliary muscle, notwithstanding the attack was very obstinate; but she ultimately did well, having again been restored to sight.

I am indebted for the particulars of the four following cases of glaucoma to my friend and colleague, Mr. Hogg, under whose care they were whilst in the hospital:—

CASE 23. *Subacute glaucoma.*—J. B——, aged fifty-two, had subacute glaucoma of the left eye, for which Mr. Hogg operated on the 17th August, 1860, with success. The case was reported at page 383 of THE LANCET, Oct. 20th, 1860, (Case 12.) I again refer to it to show that the benefit has been persistent, as will be seen by the following report of Mr. Hogg:—"This patient returned to the hospital, January, 1861, suffering from all the symptoms of acute glaucoma of his other (the right) eye. For certain reasons I decided to perform iridectomy on this; but regret to say violent inflammatory action completely destroyed this eye. I saw this man only last week (August 6th, 1862,) and am glad to be able to add that the improvement in the left eye has been permanent, and has enabled him to follow his usual employment since the last report in October, 1860."

CASE 24. *Acute glaucoma.*—S. R——, aged sixty-seven, admitted October 2nd, 1861, under the care of Mr. Hogg, with acute glaucoma of the left eye. This case was so well marked that it scarcely needs a particular description. The pain was most acute, and sight entirely lost. There were cupping and pulsation of the arteries of the retina, and all the other well-known symptoms of acute glaucoma.

Mr. Hogg divided the ciliary muscle on the 3rd October. The operation gave immediate relief; and although the patient was unfortunately attacked with erysipelas, she recovered the sight of the eye, and left the hospital on the 24th October, cured.

CASE 25.—*Glaucoma.*—E. E——, aged fifty-four, admitted under the care of Mr. Hogg, August, 1861. With the exception of occasional attacks apparently of an arthritic nature, he has habitually enjoyed good health. About three years ago, without any apparent cause, the sight of the left eye began to fail, whilst at the same time he complained of circumorbital headache, accompanied by the appearance of stars falling before his eyes. Subsequently, on using the eye alone, he found that objects seemed so much reduced in size "that men were dwarfed to the size of sparrows;" till at length vision was wholly lost. In this condition he became a patient of the late Mr. Guthrie, by whom he was treated for some time without benefit. Soon afterwards the right eye became similarly involved, a like train of symptoms preceding the nearly complete extinction of its sense.

On presenting himself at the hospital the following is his condition:—The right eye has perception of large objects, though he cannot distinguish the largest of Jager's test types. Vision is entirely lost in the left eye, light and darkness being alike undistinguishable. The epithelial corneal layer is rough; pupil widely dilated and of a sea-green hue; it is perfectly inert and fixed in the strongest light thrown upon it from the ophthalmoscope, and there is considerable ciliary and sub-conjunctival injection. The anterior chamber is much reduced, so that the iris seems to impinge on the cornea. The eyeball is tense.

Ophthalmoscopic appearances.—Left eye: Media tolerably clear; optic papilla markedly cupped; whilst pulsation of its central vessels is clearly and beautifully seen. Right eye: Media more obscure; the morbid appearances are pretty much as in the left, though perhaps less marked.

Aug. 1861.—Mr. Hogg divided the ciliary muscle in either eye. The patient left the hospital a month afterwards, at which time he could walk about with safety, but could not read.

April 2nd, 1862.—Came to the hospital to-day. With his right eye he can read No. 20 of the test type at a long distance.

Ophthalmoscopic appearance.—Right eye: The vessels of the retina are large and tortuous. Left eye: The vessels are small; there is still slight cupping of the optic papilla.

CASE 26. *Glaucoma.*—R. R——, aged forty-three, a valet, admitted July 24th, 1861, under the care of Mr. Hogg. Has been a light dragoon, and served in India. Always had good sight as a young man, but in going out to India he became blind when the moon was shining; although he could see well in the daytime, he became totally dark at night. This lasted for about a week. On his return from India in 1847, he noticed that his right eye watered very much, and that it was dim at night, with a musca like a spider before it. In 1851 he injured the right eyebrow, and this was followed by severe inflammation of the eye. The sight of the eye has been gradually getting worse, and he is continually troubled with flashes of fire in the eye.

Ophthalmoscopic appearances.—Right eye: In the axis of vision, and near the yellow spot, is a purplish spot as of congestion. The fundus presents an irregular appearance throughout as of a whitish effusion beneath the retina. Numerous black patches, somewhat rounded in shape, (and these in either eye,) are mostly arranged on the outer side of the optic entrance. Optic papilla pale, and cupped; vessels of retina very small and irregular. The left eye presents similar appearances, except that the black patches are less, and the whitish ones (like millet-seeds) more numerous; these are seen to surround and encroach on the optic entrance, which has therefore an ill-defined margin.

July 26th.—Mr. Hogg divided the ciliary muscle in each eye. About three drops of fluid escaped from the left eye, and about six from the right. The patient says that the pain was very slight during the operation.

28th.—Says he can see rather more clearly with the left eye than he did before the operation; no pain.

31st.—Before the operation he could hardly see No. 12; now with his left eye he can see No. 12 at arm's length, and can read No. 4 or even No. 2 by straining the eye. With the right eye before the operation he could not read No. 20; now he can read No. 16 of the test type. He says the musca like a spider is gone.

Aug. 4th.—With the right eye he can now read Nos. 8 and 10, and with the left eye No. 1.

10th.—He can just read No. 2 with his right eye; with his left he can read No. 1 at twelve inches.

CASE 27. (Reported by Dr. BARTLEIT, late house-surgeon.)—*Glaucoma.*—E. P——, aged fifty-nine, admitted June 19th, 1861, under the care of Mr. Rouse. Has suffered a good deal from illness, and looks haggard and anxious. Has worn glasses for five or six years, for what she calls weakness, and could see very well with them until about four months back, when she accidentally discovered that she was perfectly blind with her right eye, even to inability to distinguish light from darkness. The left eye was then very good; but for the last six weeks it has gradually failed, so that now (June 19th) she can only see large objects, and cannot discern large print. During the last month she has had great pain in the right eye; she has also suffered pain in the left eye. Her eyeballs are prominent; pupils dilated and greenish; both eyes are harder than natural; slight conjunctivitis of right eye. She is now suffering from diarrhœa, which has entirely prostrated her.

Ophthalmoscopic examination.—It is impossible to illuminate the right eye. In the left eye the optic entrance seems whiter than natural; it is slightly cupped, irregular at the margin, and somewhat kidney-shaped. Dr. Bartleit did not detect any pulsation of the arteries.

June 26th.—The patient has continued very weak; but to-day Mr. Rouse examined the eyes with the ophthalmoscope. It was impossible to focus the fundus of either eye from cloudiness of the media. The left eye not so opaque as the right. Three days ago the optic entrance could readily be seen. This rapid progress of the disease determined Mr. Rouse to operate to-day, notwithstanding the weakness of the patient. He divided the ciliary muscle in either eye, and about twenty drops of fluid escaped.

28th.—Feels well. Is in no pain. Sees better with the left eye, but not at all with the right.

July 4th.—Vision improving. Could distinguish when Mr. Rouse held a watch, key, or pencil-case in his hand.

20th.—Her health is much improved, though she is still very weak. Her vision is decidedly better. Before the operation she could neither distinguish features nor the largest letters on the test board. Now she can spell out the words of No. 20.

Ophthalmoscopic appearances.—When operated upon neither fundus could be seen from opacity of the humours. Now, twenty five days after operation, the left optic entrance is plainly seen. It is white and slightly cupped. The right optic papilla is seen somewhat dimly, and appears in the same condition.

CASE 28. *Chronic glaucoma.*—S. R——, aged fifty, admitted Oct. 9th, 1861. Six months previously she was attacked with pain in her eyes and flashes of fire. The latter continued until a fortnight since, when the sight failed almost entirely, everything appearing misty and undefined. She complained of pain in her eyes; the sclerotic coats were of a bluish white colour, with large tortuous vessels extending to the cornea, around which was a bluish-red zone of vessels. The pupils were dilated, fixed, irregular, and of a greenish colour. The media were too opaque to admit of the fundus of the eye being examined by the ophthalmoscope.

Oct. 11th.—Mr. Hancock divided the ciliary muscle in either eye.

14th.—Can see more clearly, and is quite free from pain.

20th.—Has continued to improve. Can now read No. 16 of test type with ease.

The patient was ordered to wear a shade, and to attend as an out-patient.

April 11th, 1862.—Can now read No. 8 at ten inches, and No. 10 at any distance between fifteen and twenty-three inches.

CASE 29. *Glaucoma.*—H. B——, aged sixty, was admitted on the 27th of January last. She has entirely lost the sight of the right eye for several years past. About three weeks ago the sight of the left eye became dim, accompanied by great intolerance of light, and intense pain in the eye and left side and back of her head. Her sight became worse daily until now. She can just discern light from darkness. The eye presented all the well-known appearances of glaucoma.

Jan. 27th.—Mr. Hancock divided the ciliary muscle; and

as the patient was very low and weak she was ordered an ounce of bark and ammonia three times a day.

29th.—Is better. The pain is now but slight, and she can see objects moving about, but cannot as yet define them.

Feb. 5th.—Has continued to improve; there is less congestion of the eye; she can now discern objects.

10th.—Not so well; has had some return of pain. She was ordered an ounce of disulphate of quinine three times a day, and a five-grain soap-with-opium pill at night.

14th.—Better; less pain; sight improved.

March 12th.—Has continued to improve. Is now quite free from pain, and can see well enough to enable her to walk about with comfort.

CASE 30. *Glaucoma, showing the permanent benefit derived from the operation.*—On the 30th of July, 1860, I divided the ciliary muscle in the right eye of A. S——, aged seventy-five, housekeeper to my friend Mr. Powell of John-street, Berkeley-square. Before the operation she was so blind that she could not see a piece of lighted paper when held before her eye. On the 3rd of August following she was able to read her Bible with spectacles easily.

Aug. 18th, 1862.—Mr. Powell informs me that her sight remains the same, and that with spectacles she is able to read and keep the household accounts. (Case 11, published in THE LANCET, vol. ii. 1860, p. 383.)

CASE 31. *Glaucoma, also showing the permanent benefit derived from the operation.*—On Jan. 13th, 1860, I divided the ciliary muscle in the right eye of H. C——, aged fifty, a washerwoman. On the 14th of February following the sight of the eye was excellent, and she had recovered the power of adapting the eye to far and near objects.

Aug. 18th, 1862.—I saw this patient to-day. She tells me that the sight of the eye is as good, if not better, than when she left the hospital; that with the aid of glasses, which she has been obliged to wear for years, she is able to read and work without the slightest difficulty.

Harley-street, 1862.

REMARKS ON INDIAN HILL STATIONS,

WITH ESPECIAL REFERENCE TO THEIR SANITARY CONDITION.

BY W. J. MOORE, L.R.C.P.,

IN MEDICAL CHARGE OF THE ABOO SANITARIUM, FORMERLY RESIDENT SURGEON AT THE QUEEN'S HOSPITAL, BIRMINGHAM.

(*Concluded from p. 254.*)

THE history of the Mahammurree, or Indian plague, which formerly ravaged the Himalayas, from the Snowy Range downwards, affords an example of what will arise from defective sanitation and hygiene on Indian mountain ranges, and also a striking instance of the success of preventive measures in arresting the progress of epidemic disease.

This malady seems first to have appeared in the provinces of Kutch and Goozerat in the year 1815, whence it spread to Kattywar and Scinde. In 1825, however, it broke out with renewed violence in the mountainous territory of Kumaon. In 1836 it appeared with virulence at Rajpootana, and, as the first reports of its existence came from the town of Pali, it received the name of "Pali plague." In 1850 a fresh outbreak occurred at Gurwall, Kumaon, and other Himalayan localities.

The general characteristics of the disease were intense typhoid symptoms, with formation of boils or abscesses about the body, particularly the axillæ. The localities which were infected were those where filth, want of ventilation, poor diet, and malaria had deteriorated the systems of the inhabitants. This was especially the case in the mountain villages, where the people, on account of the cold, endeavoured to avoid contact with the fresh air by every means in their power—living in much the same condition by choice as our prisoners, a hundred years since, were obliged to do in old England's gaols. On the inhabitants being made to adopt a few simple sanitary regulations the disease quickly declined, especially in the mountain ranges, where it had expended its chief force; showing that such localities are most liable to be affected by epidemic disease, and also that in the same climates sanitation is a certain preventive means.

I have already given reasons why drainage should be particularly attended to on hill stations, in the oozy nature of the soil and in the peculiar conformation of the rock underneath. The necessity of clearing away all deciduous vegetation, and of not allowing it to arise and decay unchecked,—as is too much the custom,—scarcely needs demonstration.

I now proceed to give a few extracts from published reports, or communications I have received, showing the unsatisfactory condition of many of our chief hill stations.

According to Mr. Grant,* "nothing could be worse than the state of the conservancy at Simla." He describes the smells along all the bye paths as being most disgusting, from accumulations of human ordure, offal, and dead animals in the numerous deep, close ravines that intersect the station; in fact, a native population, amounting to 10,000 or 12,000 people, was scarcely restrained by any police rules, and hence an amount of nuisance hardly credible. That the sanitary condition of Simla is not much improved in the year of grace 1862 is evident from the subjoined information afforded me by Assistant-surgeon J. J. Clarke, now in medical charge.

Dr. Clarke writes (Jan. 10th, 1862):—"The native bazaar is built of tiers of houses, on the south side of the hill, and cuts the station of Simla in two, with about the same number of European bungalows on the eastern as on the western side of it. Its main street, which is a thoroughfare, and the high road from 'Chota Simla' to 'Boileau Gung,' is kept clean, and is drained by means of open drains which flank it on either side. Its lower streets are for the most part filthy, badly drained, and with no well-adapted means for clearage. It is densely populated, and the nuisances of this large population are allowed to ooze and dribble forth of themselves, finding their way into the several nullahs which run down the side of the hill. So that in truth the whole filth of this extensive bazaar lies hoarded in these several cesspools during the hot season until the rains, impregnating the air with emanations most detrimental to health. Neither the local nor the municipal authorities appear to have instituted any measures for providing for a complete system of drainage. If, in past years, the welfare of the European community had been duly considered, some authority or other might have prevented the growth of the bazaar to such an enormous and unnecessary extent. It is now a great central evil, militating against the sanitation of the station, and instead of being, as it should be, a clean, regularly-built native city, with only a sufficient number of shopkeepers and servants to minister to the wants of health-seeking Europeans, with suitable measures adopted for its clearance and drainage, it is an irregularly built, unsightly collection of houses—a bazaar, in fact, many times larger than it need be, harbouring the lowest dregs of native society; and radiating from it in all directions are drains and cesspools offensive and filthy to a degree."

When such is the condition of the chief Bengal sanitarium—only so in name—no wonder diarrhœa is so prevalent there as to have acquired the name of "Simla trots"; no wonder that Dr. Mackinnon, Deputy Inspector-General of Hospitals, should remark, "Of late years Simla has rather retrograded in public opinion as a sanitarium."†

Dr. Mackay‡ reports of Otacamund: "The station is divided by a deep valley, a large portion of which is filled with water forming a lake. At the upper extremity of this, the large station bazaar is situated. The houses there are crowded together; those in the lower street are built close to the water, many of them on a foundation formed of the rubbish thrown out from the houses above and the filth washed down by the rains from the upper street. With every natural facility for doing it effectually, drainage has been totally neglected, not only in the bazaar, but throughout the whole station. It will hardly be believed that undrained swamps still intersect this important sanitarium. Some of the best houses are built on these swamps, some over them, and not a few on a lower level than the swamp itself." The potato cultivation, the noxious weeds, nettles, brambles, giant thistles, and lobelias, are described as most luxuriant and objectionable. "In short, the whole station is a strange mixture of neglected compounds, bogs, and neat flower-gardens. Every convenient bush is made use of to deposit filth under of every description. The sweepings and refuse of each dwelling are thrown wherever they can be conveniently disposed of. It is argued that the station has been healthy—that such things are better left as they are, and that no injurious consequences can result in this region!"

It has already been demonstrated in this paper that such a

* Indian Annals of Medical Science, 1852.

† Report on the Extent and Nature of Sanitary Establishments for European Troops, p. 73.

‡ Madras Medical Journal, vol. v., 1861.

region, partaking of both the temperate and tropical climates, is just the locality where the most fearful diseases of both climes can exist. It has also been shown that Dr. Mackay's prophetic voice, that "should the preparations for the reception of cholera continue, in the way of a disregard of all sanitary arrangements, there is every reason to believe that cholera will some day exhibit its virulence on the Neilgherries"—has already come true.

A leading article in the *Neilgherry Star* of Nov. 13th, 1861, speaks of Otacamund in these terms:—"Let anyone reflect for a moment what must be the state of the upper portion of the lake. We know not what may be the exact population of the bazaar, but we should certainly estimate it at upwards of 2000. What effect, then, must be produced by the dirt, refuse, and filth of this large number of human beings cast daily into the head of the lake! Let anyone compare the water of this part with that where the lake overflows the lower 'bund' and empties itself. The one will be found filthy in the extreme, the other quite clear. The lake is our filter. We cast in our dirt at the top, and draw off the clear water at the bottom; the only unfortunate part of it being, that the clear water goes from us, and the filth remains to poison the lake and breed disease!"

Of Nynee Tal it is stated: "The Aya Pulta side of the lake is dreadfully damp; hundreds of trees might be felled with advantage to those who live on that side. A place so shut in by nature as is Nynee Tal requires no superabundance of trees, and still less of jungle, to make it unhealthy; and those who have passed a rainy season there can hardly forget the one drawback to a residence in that beautiful spot—the cold, damp smell that arises before sunset and continues throughout the night, which a dozen sharp hatchets might remove in a short time."*

A late writer in the *Times of India* (Sept. 7, 1861,) states of the same station: "Let the brushwood and jungle be cleared away, leaving only so much timber as is necessary for scenery. If anyone doubt how unhealthy Nynee Tal is becoming, let him go into the graveyard and count the number of new graves, and then let him go into the soldiers' hospital and see the pale yellow faces of men in whom hope has died away, who are worse than when they came up.....Another great nuisance of Nynee Tal is the rank state of the weeds in the lake, and the jungle round it. To walk round the lake on the lower mall is quite enough to give a weak man a dangerous fever, so great is the malaria."

Of Kussowlie it is stated,† that Dr. Taylor attributed the great prevalence of diseases of the intestinal canal in some measure to the nature of the locality, but more "to the foul atmosphere from privy filth in which the barrack portion of the hill was enveloped." A year later, the 29th Regiment lost 32 men by the same disease. "Here Dr. Taylor thought the increase of the disease must be attributed to the increased foulness of the hill."

Nearly every sanitary defect which has been mentioned as existing at other hill stations is to be found on Mount Aboo. Holes and pits are numerous; little effort has been made to check the growth and decay of deciduous vegetation; drainage is almost unknown; marshy spots abound, both in the centre and around the station; the ravines are used as temples of cloaca by the natives, and hence the smells which infect the roads; dunghills (until representations were made on the subject) adjoined every house. There are no public latrines for the natives, *and not a single public scavenger is employed for the station.* By the latter remark it is not to be understood that there is no conservancy establishment attached to the military hospital and barracks, but that the whole extent of station occupied by the civilians, officers in civil employ, visitors, &c., is unprovided with these necessary servants.

Such being the sanitary condition of Mount Aboo, it ceases to be a matter of surprise that during the past six years the ratio of admissions per 1000 strength have been, of intermittent fever alone, 1222·74.

In proof of what was previously advanced—namely, the assertion that the malaria of the mountain top is of a diluted nature, it may here be stated that the mortality during the same six years has only averaged 1·5 per 1000 strength for malarious fever. The latter fact appears to demonstrate that where such a mild form of malaria only exists, its total removal might be easily obtained by a little attention to common sanitary matters.

It is, however, an ungrateful task to continue this record of sanitary defects in those very localities which above all others should be free from the sources of disease, and it affords pleasure to be able to bring forward communications showing that, in some places at least, attempts have been made to remedy the existing state of things. Thus of Simla (the description of the bazaar of which place has been given in the words of Dr. Clarke) Dr. Mackinnon, Inspector-General of Hospitals, states:

"Mr. Ross, in joint medical charge of the Sanitarium, deserves much credit for promoting the formation of a sanitary establishment. Public latrines, in suitable situations, have been erected, and the station has been divided into twenty-four beats, to each of which a sweeper has been appointed. A European superintendent supervises the whole. This establishment has been in operation this year for the first time, and its effects appear to have been beneficial to the public health."*

Dr. Sparrow writes to me from Landour, (Jan. 6th, 1862.) "From the natural position of Landour, being on the summit of a long ridge, with abrupt declivities on either side, water runs off freely into the nullahs about a thousand feet below; the hill is but thinly wooded; there is scarcely any underwood. During the rainy season an extra conservancy establishment is entertained. To my belief there is not a better drained or cleaner station in India. The bazaar is well kept, well drained, and clean. This is owing, in my opinion, to the fact of its being under military, and *not civil*, control."

Doubtless any person who takes the trouble to peruse the foregoing remarks and descriptions of sanitary defects, will be lost in amazement and conjecture why matters so self-evidently destructive to health are allowed to continue, and especially in picked localities, having the name of Sanitaria. Such reason, however, has just been stated in Dr. Sparrow's communication.

The majority of hill stations are situated in the territories of allied princes, and are the resort of civilians, officers in civil or political employ, officers on leave, and officers sick during the hot weather, and in many instances during the rains also. During the hot months, the causes of disease—as is the case on the plains—are not so rife as in the cold season. Before the former period commences, marshy spots have become dry, vegetation has decayed, or been eaten by foraging bullocks and goats, and the greater power of the sun scorches and dries up ordure and excrement, certainly to a much smaller extent than is the case on the plains, but still sufficient to prevent, in a great measure, that decomposition, *vid humidâ*, which takes place during the cold season, and immediately after the rains.

Thus, individuals making hill stations a residence during the hot weather only, cannot fully appreciate those causes of disease which are in existence at a different period. Such persons coming from the heated plains into a temperature some ten or twelve degrees lower, finding themselves free from the plagues of heat, flies, and mosquitoes, getting refreshing sleep at night, and able to take exercise during the day, imagine the change delightful, and the place, in comparison with the plains, a "perfect Paradise." They see at this season little disease present; they imagine it is always the same, or, if told otherwise, they congratulate themselves that *they* will not be here during the unhealthy period.

It cannot be expected that the establishment of servants as scavengers, &c., attached to any body of military which may be present at a sanitary station, should keep the whole locality clean and in good order. Neither can it be expected that Government should pay for this necessary work being done. The great majority of individuals who resort to hill stations do so for their own pleasure and amusement, either to escape the heat of the plains, or for change of scene and society, and it is by such temporary residents, or by those who make a profit of letting houses to such visitors, that the expense of sanitation should be paid. At the same time, sick officers—at all events those not in receipt of a certain monthly pay—might be exempted from the tax.

Until something of this kind is effected, those sanitary stations where civilians and military are both located, will only be so in name. The former, during their short stay, heap dirt *stratum super stratum* for the benefit of the latter during the cold and damp seasons. Their brief residence renders them indifferent to drainage, or any other sanitary regulation; and, as I stated in a certain communication on the subject, it is of little use to keep the neighbourhood of the barracks and hospital in a satisfactory sanitary condition if the inhabitants of these buildings are exposed to the causes of disease when they walk abroad, or have them wafted to them as they sit or sleep at home.

Dr. Mackay, in his description of the sanitary condition of Otacamund, already referred to, states that it is argued such has always been the case; that it is better to leave such matters

* Kumaon and its Hill Stations. Calcutta Review, June, 1856.

† Report on the Extent and Nature of the Sanitary Establishments for European Troops, pp. 59-60.

* Report on the Extent and Nature of Sanitary Establishments, p. 73.

alone; that no evil can possibly result in such a climate! I also have heard much the same arguments used on Mount Aboo, and can only remark, "Ignorantia facti excusat."

When one gentleman exclaims, "Such has always been the case;" another, "These doctors are always bothering about sanitary matters;" a third, "Why should I clear my compound when I am only here for a few months?" a fourth, "Wait till the rains, and all the dirt will be washed away;" a fifth, that the abandoned commencement of a well, in which rubbish is deposited, is no nuisance; a sixth, (ignoring the fact that each year the place becomes dirtier,) "How do you think we managed to enjoy such good health before all this *fuss* about sanitary reform?" When these expressions constitute the feeling of the community on such matters, nothing but orders from superior authority will induce an alteration; nothing but orders will place the inhabitants of such a locality on a level, as regards sanitation, with the Israelites of old, who, under the Mosaic law, were obliged to remove and bury their excreta.

The establishment of a thorough system of sanitation in hill stations is sufficiently easy. Let a couple of hundred prisoners from one of the crowded gaols on the plains, with a few Sepoys as a guard, be brought up the hill; let them first hut themselves, and afterwards set to work making drains, clearing away vegetation, enlarging roads, building bunds to tanks, &c. Afterwards let a tax be levelled, *by authority*, on each landlord or tenant, exempting, of course, the military on duty, and officers present on sick certificate. Let the proceeds of this tax be spent in keeping in repair what the prisoners have effected, and in the maintenance of a public conservancy and clearing establishment. Let the medical, as (by Regulations for the Medical Officers of the Army, par. 22, p. 81) is now the case in all cantonments on the plains, be the *ex officio* sanitary officer, with certain well-defined powers. Let some such scheme as this be carried out, and our hill stations will then be sanitaria all the year round, instead of being, as many of them now are, simply refuges from heat during the hot months of the year. These ideas I have ventured respectfully to embody in a recent report, which I have every reason to believe will receive due attention.

What has been done for the cantonment and town of Kurrachee may be easily effected for our hill sanitaria. Dr. Grierson, in his "Report on Cholera in Scinde during 1861," (read at the meeting of the Bombay Medical and Physical Society, held in December last,) states: "The regularly paid, well-fed troops suffered but little; the other inhabitants comparatively little: for in these stations, and others to some extent, hygiene has not been unknown. It is due to Sir Bartle Frere, K.C.B., to state, that in Kurrachee first, and afterwards elsewhere, he originated changes and improvements in this direction, which only require extension, improvement, and supervision, to give Scinde a character of excellence in this respect, and to protect, in a great measure, its inhabitants from the ill effects of epidemic states of the air. Not simply the removal of refuse, offal, waste, filth of all descriptions, is insisted on; but the disposal of all noxious matters by inhumation and incineration in furnaces, constitute the peculiar features of the hygienic measures adopted in the province."

Mount Aboo, Bombay Presidency, July, 1862.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

GUY'S HOSPITAL.

CASES OF EXTRA-UTERINE FŒTATION; REMOVAL OF FŒTUS BY ABDOMINAL SECTION.

(Under the care of Dr. J. BRAXTON HICKS.)

CASE 1. *Three years since termination of pregnancy; communication with bladder; operation; recovery.*—MRS. H——, aged forty. Many children. About four years ago she became pregnant; but having passed over her full term, and the movements having ceased, she applied in consequence, twelve months after conception, as an out-patient under Dr. Hicks. She had an oval tumour, obliquely placed rather more to the left side of abdomen, distinct from uterus. She was then taken in under Dr. Oldham, remaining two months, and went out much improved in health, without any pain in tumour. At intervals of about nine months each she was twice readmitted under Dr. Oldham, suffering from irritation of bladder, and pain over the tumour. Upon the last occasion oily matter and pus came in the urine. However, she was readily relieved from these symptoms, and went home. The cyst meanwhile gradually diminished in size.

About the first week in May, 1862, Dr. Hicks was called to see her at Lambeth, and found her labouring under acute cystitis, with putrid urine. Bones were detected by catheter to be entering the bladder. She was suffering greatly from pain, her general health very bad, without appetite or sleep, and she was much emaciated. The cyst had become resonant. An operation was proposed, and in the course of a week consented to, during which time, however, some small phalangeal bones passed in the urine. The tumour at this time extended upwards to about halfway between the pubes and umbilicus.

On the 15th May the patient was placed under chloroform, and an incision was made by Dr. Hicks rather to the left of the median line, about the centre of the tumour, through the parietes, till the peritoneum was reached. Here an artery gave some trouble in securing. After this was tied, the incision was cautiously made through the peritoneum, which was found completely adherent to that of the cyst. The opening was then enlarged to two inches and a half in length. The cyst being opened at the same time, a quantity of fetid gas escaped. The cyst was adherent to the bones, which were partly imbedded in it. The small and straight bones lay in the centre, while the flat kinds lined the cavity. These were removed last of all carefully, so that the cyst might not be injured. One small bone was removed from the opening in the bladder, which admitted the point of the forefinger. Every bone was separated from its fellow, and reduced to its fœtal elements. About 168 portions were thus removed by an ordinary dressing forceps. It was found necessary to bend round the parietal to draw them through the external opening. There was very little flesh left on the bones, nor any trace of placenta. As there was no bleeding into the cyst, the upper two-thirds of the external wound were brought together by sutures, the lower being kept open to give egress to discharge.

Since the operation the patient has not had an untoward symptom, but has rapidly gained her health, sleep, and appetite. Healthy suppuration of the cyst took place about the fourth day, before which the discharges were offensive. The catheter has been kept in the bladder continuously, in order to facilitate the closure of the fistulous opening. Urine occasionally passed by the outer opening up to the seventeenth day of the operation, but since that it has not done so, although on one occasion, from occlusion of the catheter, eight ounces of urine had accumulated.

CASE 2. *Extra-uterine fœtation; removal of putrid fœtus by abdominal section; death.*—This patient, who was about thirty-five years old, and who had had one child about eight years ago, had passed over the full period of a suspected pregnancy by six months. About three weeks before admission the tumour, which was of the size and form of a uterine pregnancy of between seven and eight months, and which contained fluid in which external ballotment detected a movable solid, suddenly evacuated the fluid, and became resonant from the admission of gas. She had no pain after this, but irritative fever set in with much depression.

She was admitted March 3rd, 1862, and for about two or three weeks improved considerably. The oval form of the tumour was gone, and it had subsided down to the umbilicus, its long diameter being transversely placed from one iliac fossa to the other. It also occupied some of the cavity of the pelvis. Examination per vaginam and rectum showed no indication of pointing into these channels, nor in the direction of the parietes, although it was suspected, from former tenderness, that adhesions existed in the left inguinal region.

It was hoped at first that as she improved, time would be given Nature to indicate a direction in which evacuation might take place; but after three weeks she rapidly became lower, with vomiting, and œdema of legs. Dr. Hicks therefore, in consultation with Dr. Oldham, decided on attempting removal of the fœtus by abdominal section. Although at the time of the operation she was so very low that they considered the chance of recovery very small, yet it was thought that the only

chance remaining to her was the removal of so large a putrid body. Accordingly, on the 2nd of April she was placed under chloroform, and Dr. Hicks divided the abdominal parietes for about three inches, from about half an inch above the pubes in the median line, down to the peritoneum, which was carefully opened, and found to be not adherent, at the point of incision, to the cyst, which appeared of a fibrous lustre. There were adhesions a little to the left of the opening. The abdominal walls were pressed against the cyst whilst and after it was opened. A quantity of most fetid gas escaped, and a decomposing fœtus was seen within. The head was in the right iliac fossa, the breech in the left, and the arm was at the wound; this was carefully lifted, and the thorax brought up sufficiently to pass a strong scissors underneath. The body was thus separated into two parts, and the breech end first extracted. By this means very little displacement occurred. The parietal bones were detached from the head, and were removed immediately after. The cyst retracted on the right side after the removal of the head, and a portion of intestine came into sight. It was replaced carefully, and the cyst sponged out. The upper two-thirds of the wound were then brought together by sutures. She appeared for some time to rally; but vomiting came on, and she sank in twelve hours.

The autopsy showed that the vomiting had pushed the intestine again into the cyst, which had receded on the right side. The cyst was adherent to almost all parts within the cavity of the false and true pelvis, and had thus caused the œdema of the legs; but unfortunately it was not so anteriorly, except in the left inguinal region. There was a firm adhesion to the colon, but the opening was not clearly made out, from the difficulty of removing the parts. This also made it uncertain as to the nature of the fœtation, for the cyst adhered at its middle to the posterior part of the uterus, which, however, formed no portion of its walls. There was no trace of funis or placenta. The liver was exceedingly fatty.

Dr. Hicks remarked, clinically, that in any future case, if no adhesions existed at the point of incision, he would unite the edges of the opening of the cyst with those of the external wound before extracting the fœtus—a point, he remarked, not sufficiently dwelt upon in these cases of "primary abdominal section."

CARCINOMA OF THE ŒSOPHAGUS; RUPTURE INTO THE CHEST.

(Under the care of Dr. REES.)

Thomas R——, aged fifty-eight, was admitted on the 17th of June, 1862, in a state of collapse, with symptoms of acute pleurisy; but as no history could be obtained, it was impossible to say what was the cause. He died on the 20th.

The body was examined twenty hours after death. A large part of the œsophagus was converted into a mass of cancer. When opened, all trace of the tube was lost from above the bifurcation of the trachea as far as the stomach. A large cancerous sloughy surface formed the interior of a hollow space through which the food had passed. Its walls were thick, and composed of tolerably firm cancer. The disease ceased at the stomach. The right side of the chest was full of a dirty-coloured, highly fetid liquid; the lung itself was compressed; the disease of the œsophagus had ulcerated through the pleura on the right side, setting up the fatal pleurisy. The cancer of the œsophagus was connected with similar disease of the glands around it, and these were connected with a similar mass below the diaphragm. Here there was a large mass of cancer situated in the lesser curvature, and associated with cancer of the lymphatic glands. From this the disease also proceeded down to the lumbar glands and to the mesentery, where the glands were much enlarged: they were soft and vascular. The liver was full of cancerous nodules, some white and tolerably firm, others vascular and soft.

It will be seen that the disease about the diaphragm, both above and below, formed one contiguous mass, there being no cancer transmitted to a distance.

ST. GEORGE'S HOSPITAL.

CRUSHING OF THE ARM BETWEEN TWO COG-WHEELS, SO THAT IT HUNG BY SHREDS OF SKIN; AMPUTATION AT THE SHOULDER-JOINT; SLOUGHING OF THE FLAPS; RECOVERY WITH A GOOD STUMP.

(Under the care of Mr. PRESCOTT HEWETT.)

THE nature of the injury, the extent of the hæmorrhage from division of the axillary artery, and sloughing of the integuments subsequently, necessarily invest the recovery in the following case with some amount of interest. The removal of the limb at the shoulder joint, under the peculiar circumstances narrated, was a proceeding that taxed the skill of the surgeon, on account of the difficulty experienced in obtaining skin enough to cover the ends of the bone. For the notes of the case we are indebted to Mr. Thomas P. Pick, surgical registrar to the hospital.

Robert C——, aged twenty-five, engine-driver, admitted June 23rd. A short time before admission, as he was oiling some machinery, his clothes became entangled, and his arm was drawn in and caught between two cog-wheels. There was a large amount of bleeding, which was, however, controlled before admission by a handkerchief tied tightly round the shoulder. He is reported to have been a sober, steady man.

On admission, the arm was found to be separated from the rest of the body about two or three inches below the shoulder-joint; the bone was completely divided, and the arm hung by a few shreds of skin; the integument over the shoulder and on the wall of the chest was much bruised and lacerated; the bone was protruding from the wound, and the axillary artery completely cut across. The patient was very faint. He was put under the influence of chloroform, when the artery was first secured by Mr. Hewett, who then proceeded to amputate at the shoulder joint. This operation required some nicety, as, on account of the laceration of the skin, it was difficult to obtain enough integument to cover the end of the bone. A very fair stump was, however, obtained. He was ordered thirty minims of the sedative liquor of opium, with extra diet and two pints of porter.

June 24th.—He had passed a very quiet night, and appeared comfortable; he had quite rallied from the collapse. To have one grain of opium every night.

25th.—The dressing was removed from the stump, and there was found to be considerable discharge; the edges of the wound looked foul and sloughy. Reaction had now set in; he was very restless; the skin was hot and dry; the tongue furred; the pulse 126, throbbing.

28th.—Much quieter; the pulse has again fallen; the skin is cool and moist; tongue clean; appetite good; he appears cheerful, and suffers little pain; there is immense discharge, of a very fetid nature. Ordered, a lotion of permanganate of potass; also four ounces of brandy, and soda-water.

July 1st.—All the bruised integument has sloughed; there is an immense discharge; pulse quiet; tongue clean.

8th.—All the sloughs have separated, and left a healthy granulating sore; he gets up and walks about the ward, and enjoys his food. To have four ounces of red wine.

15th.—The wound is granulating freely; in one place there are one or two small sloughs to separate, but around the edges cicatrization is going on rapidly.

Aug. 7th.—The wound is all but healed; general health good.

14th.—He was discharged this day to go into the country. He had a very good stump, there being a capital cushion over the end of the bone.

METROPOLITAN FREE HOSPITAL.

DISLOCATION OF THE FEMUR IN A YOUNG BOY; REDUCTION WITHOUT EXTENSION.

(Under the care of Mr. HUTCHINSON.)

A LITTLE boy, aged seven, was admitted a week ago into the hospital with dislocation of the femur. The accident had occurred in a fall, but as to the exact direction in which the violence had been applied it was impossible to obtain reliable information. The symptoms were well marked, and were at once recognised by Mr. Addison, the house-surgeon *pro tem.* Mr. Addison made ineffectual attempts to reduce the bone by extension without administering chloroform; but not succeeding, he decided to leave the case till next morning.

Mr. Hutchinson saw the patient about fourteen hours after the accident. He complained of great pain, and resisted all attempts to examine the limb. There was, however, little or no swelling about the hip. The symptoms were as follows:—The left thigh was held bent on the pelvis, the knee directed inwards, and the foot inverted; but the inversion was not very noticeable owing to the bent position of the limb. The distance between the great trochanter and the crest of the ilium was two inches and three quarters on the left side, and three inches and a half on the right. The rounded head of the bone was easily felt thrown backwards, and resting directly above

the tuber ischii about two inches higher. As he would not allow the limb to be straightened, no measurements as to relative length could be made. When fully under the influence of chloroform, however, it was ascertained that the left limb was an inch and a half shorter than the other. Mr. Hutchinson accomplished the reduction with the greatest ease. Taking hold of the knee with one hand, and of the hip with the other, he everted the limb, and gently lifted the head of the bone into its place. It slipped into the acetabulum with a very decided snap, and perfect symmetry, with good motion in all normal directions, were at once restored.

The dislocation was either very low down on the dorsum, or into the ischiatic notch, in all probability the latter.

CHARING-CROSS HOSPITAL.

CASE OF DECAPITATION OF THE HUMERUS IN A CHILD TWENTY MONTHS OLD.

(Under the care of Mr. BARWELL.)

R. M——, aged sixteen months, became an out-patient on 26th March, 1862, with a swelling in the right axilla, just behind the edge of the pectoral muscle. The child was a very little creature, though the mother was a fine, well-grown woman, but her temper violent. It appears that about two months previously the child, who was learning to walk, was allowed to hang upon one arm, and to twist round, and that afterwards, the arm seeming painful, she was brought to the hospital; and although no special injury was detected, there were signs of some mischief. The arm was bound to the side, and rest enforced. The mother returned once or twice; but, the arm getting better, she left off attending. However, in a few weeks, the pain returning, the child left off using the arm, cried when it was touched or moved, and a swelling appeared in the axilla, as above described. The child was now brought as an ordinary out-patient. Mr. Barwell could detect no crepitus or other sign of bony injury; but diagnosed a suppurative inflammation of the shoulder-joint. He ordered the arm to be bound to the side, with a pad under the elbow, of sufficient thickness to prevent any pressure in the axilla; a tonic was prescribed. The swelling in the armpit, however, suppurated, and was opened on April 23rd. The shoulder continued very painful, and another swelling near the posterior boundary of the axilla about the 6th May soon gave evidence of its containing matter. During this time the child was losing health very fast, and caught the whooping-cough. On examining the arm on the 19th May, a crepitus in the joint was discovered on rotation, and a probe passed deep into the sinus touched dead bone. Mr. Barwell offered to admit the mother into the hospital with the child, and explained that an operation for the removal of dead bone would be necessary; but reasons were given for postponing the operation. At the end of June the discharge had much increased, and the swelling was considerably larger. The child's health was so much depressed that she hardly slept at night, and ate scarcely anything. The operation was therefore more urgently pressed. Accordingly the child with its mother were taken into the children's ward, and, having obtained the acquiescence of his colleagues, Mr. Barwell intended to remove as much of the shoulder-joint as was diseased.

June 18th.—The child being fully under the influence of chloroform, the point of a scalpel was passed deeply under the acromion, on the outside of the joint, and the incision thence continued downwards about two inches. This first cut opened the joint at the top, and matter flowed. The lower part of the incision was deepened so as to lay open the whole capsule. A few fibres of the deltoid, anterior to the line of incision, were separated from the acromion, giving better space for the subsequent manœuvres. The arm was then rotated outwards, the subscapularis divided, the bicipital groove opened, and the tendon turned inwards. The arm was then rotated inwards, and the supra- and infra-spinatus divided. The operator now passed his finger into the capsule, and finding a roughened end of bone, got the point of the finger beyond it; then taking the elbow in the other hand, he easily guided the end of the bone out of the wound. This proved to be merely the necrosed end of the diaphysis, and as much as appeared necessary was nipped off with the bone-nippers. On returning his finger into the wound, Mr. Barwell found the epiphysis lying loose, and removed it. One or two necrosed fragments were also taken away; but the glenoid process being healthy, no part of it was cut away. The wound was closed, except a portion at the middle. The arm was secured by means of a splint for the purpose, at about an angle of sixty degrees with the side, and the child placed in bed. Rather more than half an ounce of blood was lost by oozing from the deltoid muscle.

29th.—The child had slept rather better than of late. The shoulder was a little more swollen; but the wound looked quite healthy.

July 2nd.—Up to this time the wound had been quite dry; but some discharge is now established. She is now to have a teaspoonful of steel wine thrice a day, a couple of ounces of sherry in the day, and whatever wholesome food she can be persuaded to take.

5th.—The two openings in the axilla (relics of the old abscess) had skinned over; there was a tendency to collection of pus in the cavity of the late joint. A probe was pressed into the posterior of the two old wounds to allow the flow of matter; moreover, a pad was placed behind, and another in front of the joint, pressure being kept up by india-rubber bands placed over them.

12th.—The child's health has much improved; there is still some discharge from the wound, but she is desirous of using the hand, and tries to slip it out of the bandages; she is not allowed to do this, but a little passive movement is employed every two or three days.

16th.—The arm was placed in a simple sling inside the clothes; the wound had healed, all but a small part in the centre, and she was made an out-patient.

Aug. 23rd.—The child now employs the hand pretty freely, and would use it more were she allowed to do so; but there is still a sinus open, and a little piece of dead bone must apparently come away, otherwise all the wounds have healed; the movements of the shoulder are good, and its strength considerable; the health is very much better.

This case is probably the youngest instance of excision of any joint, and certainly of the shoulder. The excisions of this joint usually do well, but the improvement in health and the rapidity with which the child became desirous of using the hand are remarkable. The piece of dead bone which causes the sinus to remain open seems to be a little loose fragment on the anterior edge of the cut surface.

From the symptoms and history of the case, Mr. Barwell believed that at the time when the child was suspended by one arm and allowed to swing round, the epiphysis was broken off. As long as the cartilage which had joined this portion with the diaphysis remained, no crepitus could be produced; but when this became absorbed, the two rough surfaces being brought into contact, that symptom manifested itself.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 2ND, 1862.

DR. TYLER SMITH, PRESIDENT, IN THE CHAIR.

ON TURNING IN CASES OF DISPROPORTION.

BY ALFRED H. M'CLINTOCK, M.D.,

LATE MASTER OF THE DUBLIN LYING-IN HOSPITAL.

THIS paper embodied the results of seventeen cases which came under the care of Dr. M'Clintock in the wards of the Dublin Lying-in Hospital. In each of them turning had been performed, at various periods after the commencement of labour, on account of disproportion between the head and pelvis. In none of these cases was there any considerable deformity of the pelvis, though the obstetric histories of the women clearly showed that there must have been some slight narrowing of the superior strait. More or less difficulty was experienced in every instance in bringing down the head into the pelvis, and twice craniotomy had to be resorted to. On one occasion the parietal bone (that next the sacrum) was fractured in pulling the head through the brim of the pelvis. With one exception, all the patients were deeply chloroformed before the operation of version was undertaken. Nine of the children—viz., four boys and five girls—survived birth, though all were alive when the operation was commenced. Of the eight children dead born, five were boys and three girls. The heart continued to pulsate for several minutes after birth in some of the children recorded as "dead born," Dr. M'Clintock

not considering a child as saved by an obstetric operation, nor recording it amongst the "live births," unless respiration be fully established. All the women recovered satisfactorily but one, who died of puerperal fever, of which some cases had occurred at the time in the hospital.

In reviewing these cases, Dr. M'Clintock expressed his opinion that the operation was not so favourable for the child as some of its advocates had supposed, and that it was only when the amount of pelvic narrowing was very slight that we could reckon with any degree of certainty upon saving the fœtus. He would not, therefore, recommend the operation in preference to the induction of premature labour in cases where an option was left us, and a decided contraction of the pelvis was known to exist. At the same time that it was a valuable resource in cases of this class which may have reached the full period of pregnancy, he proved by the fact, that of eighteen boys born to the above patients, and delivered by other modes than turning, only two were alive at birth; whereas four out of the nine delivered by turning survived their births.

Looking to the interests of the mother, the author of the paper considered that the operation of turning in the particular class of cases under notice had stronger claims; for not only did it abridge the labour process, which in itself was no small advantage, but it averted the possible contingencies of craniotomy, high forceps operation, or even of rupture of the uterus. Its great mechanical advantage, Dr. M'Clintock thought, was due, not to the position of the head nor its greater compressibility when coming through the pelvis with the base foremost, but to the unlimited amount of force which we can bring to the aid of the uterus by traction on the body of the child.

Dr. BARNES expressed his thanks to Dr. M'Clintock for having brought this important practical question before the Society, the more especially as his paper was based on so broad a foundation of facts. Dr. Barnes hoped that as one who had some personal experience of the operation, he might without impropriety respond to the invitation of the President. He observed that the revival of the application of turning to certain cases of disproportion constituted one of the greatest merits rendered by Professor Simpson to obstetric practice. He felt he was justified in calling it a revival, for he thought there was abundant evidence that the great accoucheurs who practised one and two hundred years ago were accustomed to trust to this operation much more freely than was now done. To this course Dr. Barnes said they were almost compelled by the want of those instruments with which in our day we were enabled to encounter cases of disproportion. Having no forceps, and but inefficient instruments of any kind, they were forced to trust to their unarmed hands. With their hands they extricated themselves and their patients from many difficulties, in which we resorted to the perforator or other instrumental aid. He entertained a strong conviction that we should return to a more sedulous cultivation of the hands as an obstetric instrument, and that material improvement in obstetric practice would result. The extension of the operation of turning as a substitute for more hazardous operations, and as a means of extricating patients from a variety of dangers, was especially to be desired. The particular application of turning to cases of disproportion was one of which he had formed a favourable opinion. At first, after Dr. Simpson's proposition to revive it, he distrusted its utility. He tried it by the favourite test of statistics. But he had since learned that we possessed no such statistics as would serve for the determination of any great question in obstetric practice. He had put the question fairly to the test of experience. He might state the general result of his observations as follows:—Disproportions might be divided into three degrees: First, there were slight disproportions giving rise to protracted labour, which admitted of being relieved by the long forceps; but the forceps must be not only long, but double-curved, well-made, and capable of being worked by the two hands. There was then a second degree, or class of cases, lying between the class capable of relief by the forceps, and the third degree, or class, in which craniotomy was necessary. This second or intermediate degree it was that properly admitted of treatment by turning. Beyond the third degree might be added a fourth, in which the Cæsarean section was the resource. It was thus seen that the operation of turning stood between the patient and craniotomy, promising to avert the necessity, in some cases, of resorting to that repulsive operation. It did not appear that the disproportion in most of Dr. M'Clintock's cases was great. It seemed probable that in some of them the long forceps might have been successful. Where there was only slight pelvic contraction, he (Dr. Barnes) thought it right to try the forceps first, and failing in this manner, to proceed to turning. It was true that the practice was necessarily experimental. Dr. M'Clintock had fairly said that we could not determine beforehand the size of the child's head. We could not, therefore, tell beforehand what the degree of obstruction would be. But if the child were born dead after turning, we had at least the satisfaction of reflecting that the child was not sacrificed of necessity by the mode of operating, as was the case in perforation. If it perished, it was because it had to pass through a pelvis whose condition was incompatible with the birth of a living child. He did not assent to the opinion of Dr. M'Clintock, that the head did not come through the pelvic brim more easily when drawn through base first, than in the ordinary mode of entry by the crown. He thought the passage much facilitated. It might seem strange, but he had seen reason to believe, that in these cases of disproportion the child had a somewhat better chance of being born alive than after turning under ordinary conditions. The common cause of disproportion was slight projection of the promontory of the sacrum; on either side a marked hollow was preserved, in one or other of which the cord would lie protected. A very valuable application of the practice was found in the completion of delivery after perforation. In cases where much difficulty had been experienced in extracting the head by the crotchet and craniotomy-forceps he had, on several occasions, delivered with ease in a few minutes by turning. Much labour to the practitioner, exhaustion and distress to the patient, were thus saved. He would make one more remark; it was, that although great force had occasionally been necessary in extracting, he had never seen the smallest injury result to the mother. The patients had recovered as speedily and as well as after ordinary labours. Dr. Barnes concluded by again expressing his sense of the high value of Dr. M'Clintock's communication.

Dr. KIDD thought that no comparison could be drawn between the statistics of former times and the present, because the influence of chloroform must be taken into account.

Dr. BRAXTON HICKS considered that the cases brought forward by Dr. M'Clintock could scarcely be fairly quoted as examples of the value of turning over the use of the long forceps in either delivering the child or in saving its life. Those cases only could be admitted as absolute proof on that point in which the forceps had been applied, and had failed to bring the head through, but where turning had been subsequently resorted to with success. Dr. Hicks instanced a case which occurred to him recently, in which the long forceps failed to bring the head through the brim, but where, by version, the child was delivered after some detention, its heart pulsating for an hour and a half after, inflation of the lungs being continued till it ceased. In this case the forceps failed. Turning gave the child a chance, to say the least, of life, which the only other treatment left—namely, perforation—could not.

Dr. GRAILY HEWITT had an observation to make with reference to the difficulty the author of the paper had alluded to of effecting the transit of the body of the fœtus, after turning, where only one foot had been brought down. He believed that the difficulty in question was not confined to cases in which the head had originally presented, as the author seemed to infer was supposed to be the case; and that, on the contrary, the same difficulty was found in other cases—in transverse presentations, e. g. He had met with a case which bore out this view of the matter. It had been a sort of maxim that the bringing of one foot down was sufficient. He thought that the erroneousness of this teaching should be pointed out, and the necessity of bringing down both feet, in cases of turning, inculcated. In common with other speakers, he begged to express his thanks to the author for the very valuable contribution he had made to obstetric science in the paper now read to the Society.

Dr. M'CLINTOCK replied at some length to the observations of the various speakers, and the meeting then adjourned.

Reviews and Notices of Books.

The Spas of Europe. By JULIUS ALTHAUS, M.D., M.R.C.P.L. pp. 494. London: Trübner.

ALTHOUGH our literature is well supplied with accounts, chemical, medical, and topographical, of different springs, it is very deficient in systematic exposition of the entire subject of mineral waters. A bird's-eye view of the whole matter was wanted, and we are bound to admit, in justice to Dr. Althaus,

that he has well supplied the want. Whilst we cannot quite agree with him in saying "that an intimate knowledge of the subject is of the greatest importance to the medical practitioner," as we are of opinion there are other things an intimate knowledge of which is of more necessity to the mass of us, yet we are willing to accord a prominent position to the history, chemical and medical, of mineral springs. Everyone, however, will be glad to have a book of research and authority, practical and theoretic, to refer to. The topic is one upon which an author is not unlikely to go astray by falling into a popular *ad-captandum* style of treatment. But in the "Spas of Europe" this mistake has been guarded against. It is purely a work of science, written unaffectedly and to the point, by one who is evidently master of his subject. The first chapter gives an account of the origin of springs, from the theory of Aristotle down to the experiments of Perrault and Delahire. In the second is considered the physical properties of mineral waters, included under temperature, colour, refractive power, and electricity; whilst the third chapter is taken with by the "Chemical Composition of the Mineral Waters." Under this head will be found notices of the "eternal fire" 7834 feet above the level of the Caspian, and elsewhere in America, Java, China, and Greece; also of the suffioni and lagunes of Tuscany; of barègine, sulphuraire, crenic, apocrenic, and kanitz acids; as also the confervæ and ulvæ met with in warm springs. The geographical distribution of the medicinal waters of the four quarters of the globe is next discussed; and then follows the "physiological action" of them. An account of the "therapeutical use" of these natural medicinal mixtures is given in the sixth chapter. Here, along with the consideration of the value of the ordinary spa waters, we have the virtues of bitter waters, brines, moor baths, muriated lithia waters, &c., discussed. A bibliography, an index of authors quoted, and an index of spas, conclude the volume, which we can confidently recommend to the attention of the reader.

A Plain and Easy Account of British Fungi. By M. COOKE. pp. 148. London: Hardwicke.

THIS is a very commendable little book. It busies itself with a subject of much interest, but of which little is known or cared for by the generality of people; and concerning which, too, if there were much desire for information, it would be a very difficult matter to point out where knowledge could be easily obtained. Works upon this department of cryptogamic botany are both rare and costly from their illustrations, and moreover deal with the matter in so technical a way as to offer but small attraction to the popular mind. In the work before us we find associated accurate scientific knowledge, full and satisfactory illustration by coloured lithographs and woodcuts, and ample and interesting information concerning the use of a humble tribe of plants to man. Many hundred hundredweight of edible fungi are annually allowed to rot off in this country, while the poor are half starving, and the rich would give their money for new and piquant dishes. On the other hand, we are not unfrequently made acquainted with the fact that people have been poisoned by eating supposed mushrooms. A general perusal of this "Plain and Easy Account" would do much to obviate both classes of occurrences. The work is even a cookery-book as far as edible fungi are concerned, and novices are fully initiated into the mysteries connected with dressing fungi *à la provençale*, of making *hachis aux champignons*, *purée* of mushrooms, and "ketchup" of fistulina, besides ragouts and other delicacies concocted from boleti, &c.

"For the true enjoyment of a mushroom much will depend upon the method of cooking, which, notwithstanding the little variety in the methods employed here, may be served up in a number of ways. From amongst the most common of continental modes the following are selected. ..... There is also an economical method, and one which may serve alternately with or as a substitute for the slovenly old English plan, which seems to reduce all cooking to three types—roast beef, boiled mutton, and grilled chops and steaks; even mushrooms must be cooked upon one of these plans, unless we can induce a change for the better."—p. 45.

Mr. Cooke's little treatise is just the thing to accomplish this, if we can but manage to enlist our lady botanists in the southern counties in the work of reform, which, it will be seen, is both botanic and culinary.

On Ovarian Dropsy: its Nature, Diagnosis, and Treatment. The Result of Thirty Years' Experience. By I. BAKER BROWN, Surgeon to the London Surgical Home for Diseases of Women, &c. Small 8vo. pp. 283. London: Davies.

MR. BROWN has had the most favourable opportunities for observing ovarian dropsy on a large scale, and he has long devoted much time and consideration to it. Eighteen years have elapsed since he published in the columns of this journal his first paper "On the Successful Treatment of Ovarian Dropsy without the Abdominal Section." In the introduction to this essay, after treating of the various plans for the extirpation of the tumour, he expressed the opinion that none of these severe operations were justifiable, until tapping, followed by the use of pressure carefully applied, had been adopted. If we interpret this gentleman's present views correctly, he still holds to this opinion with regard to unilocular cysts; for although it is admitted that too much was at first anticipated from this mode of treatment, yet there is ample evidence to show that it suffices to cure many cases where the cyst is simple.

The present work is divided into seven chapters. These are severally devoted to a consideration of the pathology, the symptoms and causes, and the diagnosis of ovarian dropsy. One chapter is occupied with a description of the varieties of ovarian tumours; while another contains a narrative of forty-two cases of ovariotomy. An impartial examination is made of the different methods of treating ovarian dropsy, together with the conditions which may render any one plan specially applicable to any particular example of the disease. There is also added a full practical account, with illustrative cases, of the operation of ovariotomy; while the endeavour is made to show in what cases, and under what circumstances, this formidable operation ought to be performed.

Up to the present time Mr. Brown appears to have performed the operation of ovariotomy forty-two times, out of which number there have been twenty-two instances of recovery. In the analysis of his cases the explanation of this apparently excessive mortality is given. It will there be seen that the greater number of fatal cases occurred among the earlier operations, chiefly in private practice; whereas those cases of extirpation which have occurred in the London Surgical Home have turned out very favourably. Thus of twenty-two cases submitted to operation in this institution, fifteen have made excellent recoveries. This circumstance is attributed to the more careful nursing and the stricter supervision attainable in an hospital than in a private house—an explanation which will appear satisfactory when it is recollected that more assiduous attention on the part of the medical men and nurses is required after ovariotomy than is needed after any other operation.

The Geologist. August and September.

AT this season of the year, the pages of *The Geologist* may be referred to with advantage for information concerning many localities of interest worthy of a visit. In the present numbers are Notes on the Geology of Maidstone, by Mr. W. H. Bensted; an Excursion to Reculver, in Kent, by Dr. Gibb; and Supposed Footprints in the Cambrian Rocks of the Isle of Man, by Mr. John Taylor. Past Life in South America is the subject of an excellent paper by Mr. C. Carter Blake; and M. Gras's attack on the Evidence of the Flint Implements in respect to the Antiquity of Man, by Mr. Mackie, the editor, is also good. There are a few observations also on the discovery of Anthracite in Silurian strata.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 13, 1862.

RECENT circumstances cannot fail to excite a feeling of uneasiness in the minds of obstetric practitioners as to the extent of the responsibility they incur. Of course the rule of law as regards the practice of Midwifery differs in no respect from that which obtains in other departments of Medicine and Surgery. The practitioner is bound to bring to his task reasonable skill, and to exercise due care and discretion. Having done this, he is justly held by the law harmless from all proceedings, criminal or civil, on the part of the patient. Hence, the source of actions for damages and of criminal informations lies in the assumption, well or ill founded, that reasonable skill and care have not been exercised, and that therefore the surgeon is answerable for any injury that may have been sustained by the patient through his default. The same law holds in the case of attorneys. If, in the course of a suit or of other legal business, it can be shown that the client has sustained injury through the neglect by his solicitor of some clearly-defined duty towards him, he may recover compensation. This liability rightly and justly applies in principle to every contract. If there were no such liability, there would be a diminished security in almost every conceivable case either for the competency or the good faith of the party undertaking to perform a specified obligation. The profession that seems least amenable to censure or to penalties for the failure of duty towards clients is probably that of the Bar. The profession that appears to be the most frequently exposed to actions is assuredly that of Medicine. An opinion would seem to be gaining ground amongst the public that medical men are responsible for any and every mishap that may occur under medical treatment. In one sense this feeling may imply a high compliment to the skill of the medical profession. Since responsibility is governed by power, the theory that medical men are liable for every mischance that befals a patient, implies that medical science is so perfect that the agencies endangering limb and life are entirely under its control. Unfortunately there is a fundamental error in the premisses. The capacity of medical men to save or to restore to health is limited by conditions beyond their control. When the physician or surgeon has done the best that science can suggest and that art can effect, he is not unfrequently compelled to acknowledge the superior power of the forces against which he has to contend. In no department is this more clearly illustrated than in midwifery, and in none is the empire of skill more signally proved. It is not improbable, indeed, that the recent extremes to which the doctrine of responsibility has been carried in obstetric cases is the direct result of the remarkable success of modern midwifery. So much is accomplished, so striking to the mind of patients and lookers-on are the triumphs of obstetric skill, that they with difficulty recognise the possibility of failure. To cite an example: it appears to be a popular belief that all injury to the mother's structures during the act of labour can be averted by the exercise of due skill and care by the medical attendant. Because in most ordinary, and in many most formidable emergencies, the integrity of the mother's person is preserved, it is concluded by the public, who are necessarily unable to institute a scientific comparison between the conditions of different cases, that whensoever an injury occurs, the medical practitioner has either done something wrong, or omitted something that he ought to have done. Litigious persons, under this conviction, at once put in action the law of professional responsibility.

The accident that has given the most recent occasion for the display of this spirit is laceration or rending of the perineum. And since a respectable practitioner has actually been cast in heavy damages for his supposed culpability in a case where this injury occurred, it is natural to suppose that the public will regard this verdict as an authoritative declaration that the occurrence of laceration of the perineum during labour is a fair ground for an action for compensation. It is therefore especially desirable, not more for the safety of medical men than for the advantage of the public, that the true measure of responsibility in such cases should be clearly understood. It may be laid down, in the first place, as a general fact, that rupture or laceration of the womb, vagina, or perineum rarely occurs in consequence of any direct action or interference on the part of the accoucheur. So far, then, as any positive malapraxis is concerned, the probability is very strong indeed, in any given case, that the practitioner is blameless. When the maternal tissues are injured, it is almost invariably the result of those powerful muscular contractions which Nature employs to bring the child into the world. The pregnant womb at the time of labour is the largest and the most powerful muscle in the body. The force it is capable of exerting is enormous. It has frequently happened that this strong hollow muscle has, in the uncontrollable energy of its efforts to expel its contents, rent itself at points beyond the reach of the accoucheur, and even during his absence. It happens still more frequently that under this violent action of the womb the resisting soft external parts give way. It is certain that if the perineum did not thus in many cases give way, the womb itself must be torn by its own violence. The child must be born; and the variable relations between the expelling power, the child's body, and the yielding capacity of the resisting parts of the mother, may be so unfavourable that Nature must break down somewhere. Either the accident already referred to,—generally fatal,—the rending of the womb, takes place, or the child must be sacrificed, or the minor evil, the rending of the perineum,—an injury sometimes afflicting, but never dangerous to life,—will happen. The rent may vary in extent; but it ought to be generally known that slight lacerations in first labours are so common and inevitable that they cannot be regarded in any other light than as a normal consequence of labour. If through a morbid condition—such as any of those inflammatory states to which married women are so prone—the integrity of the soft parts be impaired, the liability to laceration under the violent strain of parturition is greatly increased. It deserves especially to be remembered, that whilst slight degrees of laceration are almost the normal condition of labour, it is frequently impossible, by any care, to limit the extension of a laceration which has once begun. Hence, in either case, the presumption is great that a spontaneous laceration, great or small, has arisen independently of any fault on the part of the medical attendant. There remain another class of cases: those in which laceration takes place during operative measures con-

ducted by the surgeon. But, *à fortiori*, it may be concluded that, since even in the course of those easier labours in which the natural powers are sufficient to bring the child into the world, the perineum is so frequently torn, there must be still more imminent danger of this accident in those severe labours in which resort to operations is necessary to save the mother's life, and perhaps that of the child as well. In the perils of childbirth, as in many other perils to which human life is exposed, the way to safety has often to be sought through a choice of evils. Laceration of the perineum, distressing as the consequences sometimes are, is about the least evil that can occur in a difficult labour. It is, moreover, a remediable evil. For this latter reason alone it seems manifestly unjust to visit the medical man in whose presence this injury has happened with heavy damages. But it is absolutely absurd and monstrous to hold him responsible for an event which in all probability was entirely unavoidable, and which in most cases is simply the indication of the mother's escape or rescue from greater, perhaps mortal, injuries.

It is a grievous mistake to suppose that the public interest can in any way be advanced by the resort to actions for damages in cases of this kind. Whilst the conditions of Nature cannot be altered, whilst the risks of labour will continue, the only effect of straining unjustly the doctrine of professional responsibility will be to render the medical practitioner less confident and less secure in the exercise of his calling, and thus to lessen the resources that are now available against the terrible dangers of childbirth. The weight of responsibility that already hangs over the medical practitioner is often heavy enough to tax the courage and powers of the most calm and the most accomplished intellects. To add to that weight the terrorism of the law is a policy at once ungenerous and suicidal.

THE letter from Mr. SKEY in our last impression is calculated to open discussion as to the proper professional course to pursue under circumstances which no writer on medical etiquette has hitherto mentioned: for the conditions on which they depend have entirely arisen since the publication of the latest work on that subject.

In addressing ourselves to consider the proper course for medical practitioners to adopt when called on to give evidence about a "railway case," we take this letter from Mr. SKEY as a timely text; because it supplies the requisite "standpoints," and touches especially on one or two matters which need to be cleared up before deciding what to do and what to avoid when called on to furnish medical testimony. But at the outset, and before any other consideration, there is one which needs to be prominently mentioned. All statements, assertions, opinions, ideas, and conclusions have to be given to the world on oath,—this meaning that the witness pledges himself to Almighty GOD to tell the truth and nothing but the truth. A careful reticence as to the employment of inexact terms is a solemn duty which a witness should observe throughout, and it is absolutely wicked for a man of cultivated intellect to obtrude any fanciful opinions and allow these to bias his judgment and influence his decision.

As regards the particulars of this Guildford trial and our comments thereon, Mr. SKEY writes under a mistaken assumption that his evidence was especially alluded to. He was only a secondary witness, and so escaped other than general mention. But *qui s'excuse s'accuse;* and as the special purport of Mr. SKEY's letter is to explain his own proceedings on this trial, and intimate a doubt as to the correctness of our information about it, we must just set him right as to the facts; and in doing so may fairly avail ourselves of his own explanations where they bear on the general question. We entirely deny that any imputation was cast on his surgical opinion or on his professional conduct, or that any moral delinquency was attributed to him personally. The high position and esteem which he possesses render this disavowal almost needless. But the system of professional partizanship in legal inquiries, whether the case be one of lunacy, of poisoning, or of railway compensation, has been carried to such intolerable lengths, that nothing but a determined stand against it will check the sneers now so frequently indulged in as to the feasibility of obtaining corroborative medical testimony on either side of any subject.

Mr. SKEY impugns the correctness of our observation on the remarks made by the Judge in summing up the case at Guildford, but candidly confesses that he was not in court to hear what was said. It happens that our statement was, in reality, a very mild rendering of the strong remarks made by the estimable and clear-sighted Judge. We decided (from motives which all who read the trial will appreciate) not to give place in our columns to the details of the medical evidence and summing up.

The letter of Mr. SKEY is carefully worded and well written, and especially conveys the impression that its author is a keen observer and what is known as a good business man. To explain how it was he had anything to do with this trial he volunteers the following information:—

"With some claim, I trust, to credit for honesty of conduct in the share I have hitherto taken in these railway cases—all of which, by-the-bye, bear a remarkably close resemblance to each other,—I receive a subpœna from persons unknown to me, except by name, to repair to Guildford on the following morning. The particulars of the case I learnt on my arrival, and I listened to the evidence given in court in a spirit of perfect impartiality; and notwithstanding the powerful, feeling, and eloquent address of the senior counsel for the plaintiff—which I am bound in candour to say did not weigh with me one tittle,—and the entire of the medical evidence of four or five eminent and able men, I was persuaded"—

in short, that they were all in the wrong.

Now "these railway cases" do bear one very close resemblance to each other, in the fact that there are certain medical names which very frequently appear in the reports as giving evidence on behalf of the Company. The cases cited as illustrative in our recent reports on Railway Travelling, although selected without reference to this point, will serve to elucidate our meaning. We may fairly assume that a subpœna from persons unknown (attended to with such confiding simplicity, and without any inquiry as to who would pay the fee or why he received it) was served on Mr. SKEY because of those opinions which he so well expresses in his letter, and which evidently result from his studying the subject from one point of view, being previously known. It is no disparagement to him that he clings to the results of his own experience. But we claim a right to observe how this experience has been accumulated before giving up opinions very much opposed to those so well enunciated by Mr. SKEY. Indeed, there is one sentence in his letter which curiously exhibits the unconscious partiality of

the writer, since he refers to the legal representative of the plaintiff in this trial as the opposing counsel.

As to the highly coloured picture of a naughty passenger who extorts enormous sums from guileless, ill-used directors, on the strength of some ridiculous little concussion, we may refer to the Government reports on railway accidents, and what is there said as to their causes. Let proper care be exercised on railways, in place of the reckless piling up of traffic on the lines which now obtains, and we will undertake that the public shall be well content to forego that harvest of compensations for railway injuries which directors complain of as though the original fault were not their own.

"The current of imposition and untruth" (which is Mr. SKEY'S strong way of alluding to claims for compensation) "yet runs swimmingly on, and will continue to flow until men love honesty better than wealth, or until such change in the law is effected as will subject these injuries to the only arbitrament which can elicit truth—namely, that of our own profession."

With this latter opinion we entirely coincide. It was because of its utter neglect at Guildford that we were driven to make the comments of which he complains. For the plaintiff had been personally examined by medical men of the highest professional standing, and peculiarly skilled to judge as to the nature of his particular case. Here was a medical tribunal of the desired kind, and they issued a verdict in the form of a most careful and judicious report. Yet, without having previously examined the patient, or knowing anything about the case except from what he could gather in Court, Mr. SKEY expressed in the witness-box those extreme opinions which he so well describes in these memorable words:

"In a court of law the very uncertainty and the very speculative nature of our profession drive us into antagonism with each other, and thus we expose ourselves to public animadversion and bring obloquy on our honoured profession."

The obvious remedy for this is to avoid forming opinions on such illusory data only as are presented in a court of law, and to avoid giving evidence except on such knowledge of the individual case as would justify undertaking its treatment.

We can hardly wonder that, holding opinions thus formed and enunciated so boldly, Mr. SKEY should not hesitate to declare that he "scarcely knows one just verdict given by a public jury"—of course in reference to these cases. To many this assertion must appear ludicrous from the intensity of its egotism. In reality it is merely the thorough assertion of an obstinate conviction, before which the opinions of gifted medical men, the testimony of conscientious witnesses, the summing-up of judges, and the verdicts of intelligent special jurymen, all go down. There still remain several important points, to which we shall take an early opportunity of directing further attention, in reference to this much-vexed question of medical evidence in "railway cases;" and one especially deserving of consideration—namely, the expediency of appointing a Court of Assessors to try these cases, instead of leaving the injured plaintiffs to the glorious uncertainty of the law.

"DOEST thou well to be angry?" was the question asked in old time of the Hebrew prophet; and he answered, "I do well." Dr. CLAY appears to follow the example of the Jewish seer. He is still carrying on an angry altercation with Mr. FOLKER, but we think with more valour than discretion. Why was it necessary to delay his explanation so long as to make it lose much of its force and all its graciousness? How much better would it have been had he, when he knew that the question put to him came from a gentleman of character and position in the profession, at once given a distinct answer! We regret that he did not do so, but took the extraordinary step of instructing his solicitor to institute proceedings against a member of his own profession, who, whatever may be the merits of the case, was evidently actuated by the most honourable motives. Can it be seriously asserted that merely asking such a question, even though it might have been upon erroneous information, is really libelous? Is it reasonable to suppose, after the explanations which have been given, that Dr. CLAY could obtain a verdict? We hesitate not to say that it would be a misfortune to Dr. CLAY and the profession if the answer were in the affirmative. From the facts elicited it is evident that Dr. CLAY'S reputation was suffering in the opinion of a large number of his medical brethren from the report which had obtained credence with them. One would have supposed that he would have been obliged to any gentleman who would have given him an opportunity of contradicting a rumour that was operating injuriously to his reputation. Knowing that the report was in circulation, we felt it our duty to give him an opportunity of replying to it. The position which Dr. CLAY has obtained in his profession is due to a long practice of legitimate medicine. We say advisedly that it would be a misfortune to orthodox medicine if his name were to be associated with the homœopathic delusion. That he should have hesitated to meet, frankly and unreservedly, the insinuation made against him was a mistake to be deplored. Perhaps it was natural that he should "be angry" at his reputation being assailed. Had he been a man of less mark, he might not have been subjected to the imputation. If the charge made appeared to him personally offensive, it was at all events a compliment to his position. As the exponent of the opinions of the profession, we regret the course that Dr. CLAY has thought proper to pursue. We live in times when it becomes absolutely necessary to vindicate the rights of those who practise medicine on sound and honourable principles; and we look to those who occupy prominent positions amongst us to uphold by every means in their power those principles of practice which have been consecrated by the labours of the most distinguished thinkers and the most successful practitioners in our art.

Medical Annotations.

"Ne quid nimis."

SMALL-POX.

JUST at this moment, when the characters and relations of ovine variola are affording the material for much speculation and thought, it will be particularly interesting to our readers to lay before them the subjoined documents recently submitted to us respecting the early history of vaccination as practised by Jenner, and its relation to the variolous disease in animals.

The first is a narrative forwarded to us by Mr. Thomas Watts, of Frampton-on-Severn, Gloucestershire, and extracted from the manuscripts of his grandfather, Mr. John Webb, of Wick, Gloucestershire, dated September, 1799. It affords an additional evidence of the knowledge of the protective power of the cow-pox existing amongst the farming people of that valley

before Jenner, of Berkeley, made it known to the world, and worked out the great results with which all are familiar.

I.—NARRATIVE OF MR. JOHN WEBB.

"Some time in the month of May, 1792, having twenty-four children collected together at a house in Doynton for the purpose of being inoculated, and a Betty Bowman, then aged eighty, accidentally coming in, she was asked by another woman present whether she had ever had the small-pox; to which E. B. replied in the negative, asserting, with a considerable degree of confidence, that she was certain she never should, having in her younger days caught the cow-pox from a cow that was infected by a man in the small-pox. Such an opinion naturally induced me to desire of her a more particular account of the circumstance, when I was informed that when she was twenty-three or twenty-four years old she lived in the service of a farmer, on whose estate, at a distance from the farmhouse or any other habitation, there was a small cottage, together with some cowsheds; that the cottage was let to a man (probably one of his labourers), who dying in the small-pox some time betwixt Michaelmas and Christmas, the bed and bed-mat on which he had lain were thrown out into the sheds; that a cow belonging to their dairy, being, as she termed, very chilly, frequently went into the cowshed, and had been observed to lie down on or near the bed and mat; that shortly after the same cow was seized with the cow-pox, and the whole dairy, consisting of nine cows, sickened one after the other, till at length the milk was so bad that it could not be used, and of course the cows were suffered to go dry, till which time she constantly assisted in milking them; that soon after she was seized with rigors and pain in her limbs, had a tumour form in the right leg and axilla, and that three pustules appeared on the hand near the thumb, from which there was a discharge for some time (she believed about nine days); that (as before mentioned) she neither prior nor subsequent to that period had the small-pox, though she had frequently visited persons ill in it, and once in particular lay on a bed on which a person had died in that disease, the bedclothes only being changed. She likewise observed, that two or three persons who had had the small-pox were frequently among the cows, but received no infection. She likewise informed me, that she knew a Mary Hathaway, who milked infected cows at one time, and was not infected by them, but that at another time she was; that she likewise never had the small-pox prior or subsequent to that period, though she resided several years in Bristol."

The second is an interesting record relating to Mr. Benjamin Jesty, described as having been the first known person who introduced cow-pox by inoculation, at a date twenty-two years prior to Jenner's first experiment. For this narrative we are indebted to Mr. Alfred Haviland, Surgeon to the Bridgwater Infirmary:—

II.—THE PROTO-MARTYR TO VACCINATION.

"As a matter of medical history, I send you the following facts, which may prove interesting to your readers.

"At the Rose and Crown Inn, Nether Stowey, co. Somerset, my attention was drawn, on the 31st of May last, to a photograph taken from a larger portrait of a good specimen of the fine old English yeoman, dressed in knee breeches, extensive double-breasted waistcoat, and no small amount of broadcloth. He was represented sitting in an easy chair, under the shelter of some wide-spreading tree, with his stick and broad-brimmed hat in his left hand; his ample frame was surmounted by a remarkably good head, with a countenance which at once betokened firmness and superior intelligence.

"I have been thus particular in describing the portrait, for I am not quite certain whether the photograph was taken from a drawing, an engraving, or an oil-painting; if, however, the source was an engraving, in all probability there are some copies still extant, which the curious in such matters may think worth collecting.

"On the back of this photograph is a copy of the epitaph on our subject, as follows:—

"'Sacred to the memory of Benjamin Jesty, who departed this life on the 16th April, 1816, aged seventy-nine years. He was born at Yetminster, in this county; and was an upright, honest man,—*particularly noticed for having been the first person (known) who introduced cow-pox by inoculation; and who, from his great strength of mind, made an experiment from the cow on his wife and two sons in the year* 1774. (From the tomb in the churchyard at Yetminster, Dorset.)'

"I am informed by his relative, Mrs. William May (*née* Jesty) that when the fact became known that he had vaccinated his wife and sons, his friends and neighbours, who hitherto had looked up to him with respect on account of his superior intelligence and honourable character, began to regard him as an inhuman brute, who could dare to practise experiments upon his family, the sequel of which would be, as they thought, their metamorphosis into horned beasts. Consequently the worthy farmer was hooted at, reviled, and pelted whenever he attended the markets in his neighbourhood. He remained, however, undaunted, and never failed from this cause to attend to his duties; and the secret of this bold conduct may be traced in his determined chin and nose and firm lips. After living to see another enriched and immortalized for carrying out the same principles for which he had been stoned thirty years before, he died of apoplexy, like Jenner, in 1816. Jesty's experiment on his family was performed in 1774; and Jenner's on the 14th of May, 1796, just *twenty-two years later*."

VEGETARIANISM.

THOSE who are impatient of the bold repetition of old and refuted follies; who are angry with the apostles of an error who for ever preach as truths the rankest nonsense, the most worn-out fallacies, and the most childish gossip,—will have read with a feeble stir of indignation and contempt the reports of a recent meeting of the "Vegetarian Society." It is difficult to conceive a more condensed series of absurdities, errors, and misstatements than has been produced by the clever reduction into bare sentences of the opinions broached, for the purpose of abridged report in the public journals. The absurdities of the proceedings are most cleverly presented. Vegetarianism has not flourished because, while men are engaged in studying the means of destroying each other without compunction, it is not likely that they will systematically consider the life of cows, sheep, and such lower animals. It is true that such Brahminical reverence does not greatly influence our feeding at present; and if any religious arguments are to be drawn from the Bible, they assuredly are far from discountenancing the consumption of animal food, since lists of lawful food are there given; while the observation of the ordained manner of living of that large class of creatures which are destined to prey upon the vegetable-feeding animals affords a natural-history precedent. The boldness with which all the convincing series of facts is ignored is characteristic of this most absurd of systems. One speaker is described as saying, "Animals fed upon vegetable products; and all the nutriment contained in the flesh of these animals was derived from that source. Why, then, should men obtain nutriment at second hand, alloyed by the impurities of the animals through which it had passed?" As though all animals feed upon vegetable food! The notion of describing butcher's-meat as second-hand cabbage and potatoes alloyed with animal impurities, is an exquisite specimen of physiology for the people. If this speaker will observe the grinding teeth, the triple stomachs, the chewing propensities, the complicated structure and enormous length of the digestive intestinal canal in vegetable-feeding animals, and the single stomach, cutting teeth, and simple intestinal apparatus of man, he will appreciate the anatomical reasons which have determined the flesh-eating propensities of our race. Perhaps there

is not any one of our habits or natural instincts of which the cause is so clearly apparent in the elements of our structure, of which the religious approbation is more deeply founded, or of which the utility is more logically evident. Of the personal experiences related at this meeting we need not say anything; leaving the illness of the gentleman who suffered "jaundice as the consequence of chill after a plentiful meal off cheese-curds" to the special interpretation of the pathologists of his school.

But why is this school of nonsense called "Vegetarianism" at all? The name is a mockery. The diet which these enthusiasts adopt is more animal than that of half the meat-eaters; and it has been calculated by no less competent an authority than Dr. Carpenter, that in adopting the rules in a well-known "vegetarian" diet-book, the quantity of eggs, milk, and butter consumed would give half an ounce more animal matter daily in the diet than in that of ordinary families. These gentlemen have, then, a great objection to second-hand grass alloyed with animal impurity in the form of flesh, but not in the form of milk and eggs. It must be a source of wonder that, spite of the inexhaustible folly and onesidedness of mankind, a delusion so transparent as this should exist even in small proportions.

It is hardly consolatory, although in some sense satisfactory, to know that a heresy exists in the opposite direction, and that in a work published not long since in Liverpool the author announces his conviction that the human race is essentially intended to be purely carnivorous; and incidentally mentions in the course of his argument that he is on the look-out for a lady of similar convictions, who will unite her fortunes with his, and adopt his diet, with the view of bringing up a family of carnivorians. Horribly suggestive is the notion of the possible development of such a family, if the Darwinian hypothesis be well grounded. What might be the specific changes resulting from such an application of the principle of selection to the origin of species it is hard to say; but this is a rival absurdity to "vegetarianism" which may amusingly serve to antagonize it.

HEALTH OF ST. JAMES'S.

THE dirty party in St. James's, Westminster, are seeking to take advantage of Dr. Lankester's election to the office of Coroner to diminish the salary attached to the duties of the Medical Officer of Health. We warn the parish against this penny-wise and pound-foolish plan. Since Dr. Lankester's appointment, the diminution in the mortality of St. James's, Westminster, has been one hundred annually. The value of these lives to the community at the money value of life would be several thousands of pounds. To have paid £200 a year for such a saving is the cheapest possible investment. But the wiseacres of St. James's cannot see this, and are about again to bring their parish into the disgraceful condition in which it was when the Metropolitan Management Act insisted on their appointing a Medical Officer of Health. We trust the parishioners of St. James's, and especially the medical men, will look into this matter before the Vestry meets in October. Either a most indecent piece of economy is about to be perpetrated at the expense of the health of the parish, or some job equally contemptible is contemplated. We do not see any necessity for the resignation of Dr. Lankester; the offices of Coroner and Medical Officer of Health are perfectly compatible, and will mutually help each other. The duty of the Coroner is to discover the causes of death, whilst that of Medical Officer of Health is to prevent the causes of death. The connexion between the two offices is so obvious, that Dr. Letheby, at the recent Social Science meeting in the Guildhall, proposed that the duties of Coroner should be performed by the Medical Officer of Health. We should have thought that St. James's would have been proud to have retained the new Coroner as their Medical Officer of Health.

BRIGHTON DRAINAGE.

THE usual course of events is being worked out at Brighton. When first we traced some of the serious zymotic disorders which have from time to time attacked the pleasure-seeking sojourners in London-at-Sea to the intolerable dirt with which the inhabitants befoul the place, we were met with as much abuse and as many replications as though an Old Bailey lawyer conducted the defence. First, the diseases were non-existent; secondly, they were imported; thirdly, they were not of a kind due to bad drainage; fourthly, the drainage was excellent. The final upshot of all this has been, that beaten in the facts, and pursued through all the series of denials to absolute conviction at the bar of public opinion, the Brighton Town Council turned round and confessed to us, and promised at once to do better things; they set their engineers to work and discussed drainage schemes, talked about estimates, held meetings, made minutes, and of course very ostentatiously printed them. We were anxious to give the Brighton people credit for their good intentions, and, by the wide publication of these first steps, contributed to diminish that fear of the Brighton drains which last year kept so many houses empty. But these civic Solons are disposed to recover too quickly from the salutary impression of their fright; they will no longer be monks; returning prosperity brings renewed sanitary indifference.

In an excellent letter in the local journal, Dr. Hall calls attention to the persistence of the most offensive and dangerous nuisances. Simultaneously the Mayor replies to a troublesome questioner in the Town Council that he can tell people out of doors that matters are still under consideration. We have, then, to notify, that Brighton drainage is as bad as ever. The delay of the Brighton corporation is most culpable, and will infallibly damage seriously their own interests.

Correspondence.

"Audi alteram partem."

SMALL-POX AMONG SHEEP.

To the Editor of THE LANCET.

SIR,—I have just returned from Wiltshire, whither I accompanied my friend, Professor Simonds, in order to study minutely, and from a medical point of view, the serious epidemic of small-pox which has recently appeared among sheep. As I believe no other medical practitioner has as yet devoted especial attention to the subject, or made any professional report concerning it, I send you a brief record of what I observed, thinking it may be interesting to the profession, and tend to allay the alarm which just now naturally exists as to the extension of the disease to other flocks hitherto unaffected.

The disease first appeared in Mr. Parry's flock when it was feeding on the banks of the canal which runs through the Vale of Pusey, situated between Salisbury Plain on the one side, and the Beckhampton Downs on the other, three miles from Devizes. The soil is an alluvial loam. The flock was composed of ewes and lambs, and numbered about 1700. It is positively stated that no additions had been made to the flock for a long time previous to the outbreak of the complaint at the period to which I refer. It may be worth noticing that this district was perfectly free from the ovine epidemic in 1848 and 1849; the nearest flock where known to be affected was one in Hampshire.

At the time of my visit on the 4th ult., three infected flocks were under the sole supervision of Professor Simonds—viz., those of Mr. Parry, Mr. Harding, and Mr. Neate. It is rumoured that small-pox has appeared in four other neighbouring flocks.

Probable mode of infection.—The account of the outbreak in

Mr. Harding's flock was given me in the following words by that gentleman:—When Mr. Harding first noticed incipient disease, his sheep were feeding only a few fields away from the flock previously infected on Mr. Parry's property. He is quite certain that his flock had no direct communication with that of his neighbour. It is probable that the infection, aided by the heavy dews in this valley, was so conveyed from one flock to the other; for experiments (formerly made) have shown that small-pox in sheep is a highly infectious complaint. Our old friend, the starling, has been accused of communicating this disease when he perches on the sheep's back to eat the ticks he finds there, and it *is* just possible that his beak may sometimes be the medium of conveying the poison; but, as will be presently seen, the parts affected in diseased sheep are not such as the starling's beak would be likely to come in contact with. Flies have also been supposed to be agents of inoculation, and so they are, doubtless, in the advanced stages.

Mr. Harding's flock—consisting as it does of Wiltshire downs—was, at the time of my visit, folded into separate lots of from 40 to 70. The sheep were feeding on the best artificial grasses and turnips, a fresh portion being given them daily. Previously to being affected, the animals were in excellent condition, living on a good soil, and worth, say, forty shillings a piece.

The symptoms.—On entering the fold the following symptoms presented themselves:—The most sickly of the infected sheep had separated themselves from the others. They wore a marked dejected expression: the head held low; the ears pendant; the breathing quick and short; the eyelids swollen, and tears trickling down the face; the conjunctivæ varied in tint from a bright scarlet to a Modena red; a mucous discharge flowed from the nostrils, which increased in viscosity as the disease advanced, often becoming sanguineous in the latter stages; rumination was suspended and all food refused, but the poor creatures evinced a strong disposition to drink, and also to lick earth. This soil mingling with the mucus of the nose rapidly clogged the nostrils, and rendered the respiration more difficult. By placing an animal on its back, the chief seat of the eruption was exposed to view—namely, the inside of the arms and thighs. It consisted of a papular affection—in some cases confluent, in others distinct. These papules or elevations were hard, in some cases blanched, in others sphacelated—running into pustules,—the cuticle covering them assuming a brown colour. Large unhealthy sores existed in many places. The similarity between these symptoms and those observed in advanced cases of small-pox and typhus in the human being struck me forcibly; but it seemed that the difficulty these poor animals had in swallowing, and the objection to giving them drenches, rendered their cases hopeless. I put the question to the Professor, "Why not kill such suffering creatures, and thus end their misery?" His reply was, "The shepherd has not the heart to do it." Professor Simonds pointed out that the "groggy" sheep which could hardly stand—the mere skeleton of its former self—was not necessarily condemned; on the contrary, it was convalescent. The favourable prognosis was further shown by the facility with which the scabs covering the pustules could be removed, leaving a dry surface underneath; this was confirmed when the animal was put on its legs, as it began eating the vetches or taking its gruel in the troughs.

Prophylactic measures.—It may be satisfactory to the public to know that every possible sanitary precaution is being taken (under the direction of Professor Simonds) by the wealthy farmers already mentioned to prevent the spread of the disease. As soon as the animal dies, it is buried *in its skin* in a hole four feet deep. Strangers are forbidden to come near the flocks, so as to prevent extension of the disease. The shepherds' dogs are shut up at home. As soon as flocks are discovered to be infected, the healthy as well as the diseased sheep are inoculated. Professor Simonds does not advocate the inoculation of flocks previous to disease having appeared in them. The columns of *The Times* have already shown how one of these gentlemen has repurchased a portion of his flock which he sold before he became aware* that the sheep composing it were infected. It is in these various ways they hope to keep the malady within narrow bounds. I did not find that any steps had been taken to prevent the holding the annual neighbouring fairs. But so secluded is the valley in which this outbreak has taken place, that few sheep will pass it on their way to the fairs, although some may come near the infected spot on their return. It is hoped that the extensive dissemination of these facts in *The Times* may to some extent mitigate public alarm. I may further mention that in former epidemics of small-pox the disease was, I believe, confined to the neighbourhoods where it first broke out.

Inoculation.—In Professor Simonds' valuable work on Variola Ovina (Churchill), it is clearly shown that vaccination by no means protects the sheep from the future invasion of small-pox. It is in vain, then, to attempt the introduction of vaccine virus into flocks threatened with this disease. The only protection, and this a partial one, which experience in Austria, Belgium, and Great Britain has shown can be depended upon is inoculation.

It is, however, quite in accordance with what experience has taught us of other animal poisons to find, as we do, that in no instance has this ovine complaint been communicated to the cow, goat, dog, or human being, although various experiments have been instituted most carefully to test the fact.

The operation is a very simple one. It is performed in the following way:—The place usually selected for the operation is the inside of the thigh. The instrument which Professor Simonds employs is a curved needle made for the purpose with a fine and somewhat flattened point, which, having been previously dipped in the virus of a vesicle, is carefully inserted between the upper and second skin, cautiously avoiding piercing so deeply as to draw blood, which would render the success of inoculation doubtful. Great judgment is required in the selection of the fittest vesicle from which the virus should be taken. I had abundant evidence furnished me showing that inoculation may be performed on a large scale without a single unfavourable result, if proper precautions be taken.

On Thursday, September 4th, I went to see Mr. Neate's lambs. They had been inoculated ten days previous to my visit. They were feeding in a meadow on very good after-grass, and a healthier looking lot I had seldom seen. There were a few lying down apart from the others, as if somewhat sick and ailing, but this was an exception. Mr. Simonds desired the shepherd first to catch those that were the most sickly. On closely examining a large number, I noticed the following appearances, which were common to the flock:—On the inside of the thigh there was a raised, flattish, rosy tubercle of the size of a shilling; the margin appeared raised by little vesicles. In some instances the neighbouring absorbents were enlarged and hardened, and the skin was hot; but the animals did not seem to suffer from much fever, and, as I said above, were feeding like the other healthy lambs. This is the condition that we expect when inoculation has been successfully performed. In all such cases the disease takes on this benignant form, and the animal becomes no longer susceptible of taking the *natural complaint*, or becomes subsequently affected in the way those sheep were which I first described. In some few instances (together with the above appearances) a papular eruption, such as we should call *roscola*, was noticed on the skin of these animals. Such papulæ were not confluent, and I believe I am correct in stating occurred in lambs that had already probably been infected previous to inoculation, and would (had not inoculation been performed) have suffered most severely from the *natural complaint*.

When I left, Professor Simonds was about to examine every lamb, and should he find that inoculation had not succeeded, such animal would be again reinoculated. The numbers requiring such reinoculation are said to be few. As far as my observations went,—and I carefully examined a great many of these inoculated sheep,—no ill-consequences were likely to arise from inoculation, and I believe it is one of those operations that in scientific hands, and with proper care, may be performed with the best probable results. I should say, as far as I could judge in my short visit to Wiltshire, that we possess in inoculation a valuable means of modifying the effects of a most loathsome and fatal disease.

I am, Sir, your obedient servant,

Queen Anne-street, Cavendish-square, Sept. 1862. WILLIAM ACTON.

* It would be an interesting inquiry to decide what has been the effect of these sheep (lambs) mixing, even for a short time, and before the disease manifested itself in them, with other and distant sheep, as I believe was the case. Some of your readers in Wiltshire might possibly be able to supply the information.—W. A.

CONSULTATIONS WITH HOMŒOPATHS.

To the Editor of THE LANCET.

SIR,—I fear I must once more trouble you with a further correspondence between Dr. Clay's solicitor and myself, and think that after reading it, together with Dr. Clay's explanation, you will at least say that, on the Doctor's own showing, there were quite sufficient grounds to justify me in

asking him the simple question which appeared in your journal signed "Inquirer."—I remain, Sir, yours faithfully,

Hanley, Sept. 3rd, 1862. W. H. FOLKER.

From Mr. BENNETT, *Solicitor, to* Mr. FOLKER.

16, Kennedy-street, Manchester, Sept. 1st, 1862.

SIR (Yourself and Dr. Clay),—My attention has been this morning called to THE LANCET of Saturday last, in which appears your promised apology. This apology is not only insufficient, but most unsatisfactory, and so full of additional untruths that I cannot refrain from saying that it amounts to a repetition of the original slander, and clearly shows the animus which prompted your anonymous attack upon my client. I have therefore to require from you an *unconditional apology*, to be approved by me before publication, and, as before intimated, the payment of my costs; and unless, by return of post, you consent to make this reparation for your unjustifiable conduct, I will immediately institute the threatened proceedings.

You have, enclosed, a copy of my client's explanation to the public, which will be sent on Wednesday to THE LANCET for publication. Yours obediently,

W. H. Folker, Esq. ROBT. WM. BENNETT.

[With the above letter I received a copy of a letter which Dr. Clay was to insert in THE LANCET of next Saturday.]

From Mr. FOLKER *to* Mr. BENNETT, *Solicitor.*

SIR,—In answer to yours dated the 1st inst., I must say that I consider yours a very unreasonable demand.

Your client is asked a question, and now for the first time condescends to offer any explanation of his conduct; if he had done so before, all this correspondence might have been avoided, but for that your client alone is responsible.

It seems to me to be very unfair to extract an apology from me by *unequivocally denying* what he was asked about, and then publishing a sort of confession in THE LANCET directly afterwards; for most certainly had I seen Dr. Clay's explanation before, I should never have thought of honourably acquitting him of consulting with a homœopathist, against the advice of every one of my friends, although you are unreasonable enough to think even *that* unsatisfactory.

I have frankly given up the information on which I relied, and it appears that Dr. Clay and myself are now at issue on two points only—viz., did he *consult with* a homœopathist? and did he have tea with him afterwards? But in every other point we agree. After reading Dr. Clay's explanation, I am quite willing to suppose that the poor parlour-maid, on whom you lay such stress, has been mistaken, and acquit him accordingly of the latter; but as regards the former point, I can only say that *both* statements are before the public. Let them stand on their own respective merits; but to me I confess it seems curious that Dr. Clay should say "he took the case upon himself," when he only paid *one* visit; and very difficult to imagine that even a homœopathist, in regular attendance on a case, should telegraph for a physician "*without having ascertained the particulars of the case himself*," or knowing if it were necessary to do so, and then, although present and expected to act on Dr. Clay's advice, not either consulting with him or listening to his advice or remarks.

Your letters to me have all contained such strong language, and been written in such an intemperate spirit, that I must decline submitting any apology to you. I consider that I have done everything that can consistently be expected from any gentleman, but I shall be very happy to leave the matter in the hands either of the Editor of THE LANCET or the Manchester Medico-Ethical Society, and do whatever they suggest. If, however, you are determined that your client shall go to law, pray let all correspondence between yourself and me be now closed, and address yourself in future to my solicitors.

I remain, Sir, yours faithfully,

R. W. Bennett, Esq. W. H. FOLKER.

To the Editor of THE LANCET.

SIR,—Mr. Folker, in his so-called apology appearing in THE LANCET of the 30th ult., only adds to the injury I have already received at his hands, by his having accompanied it with the "information" obtained from his "most reliable source" without first ascertaining the real facts of the case. I will therefore give you a plain statement of what really did occur and as I have good reason to know Mr. Folker was acquainted with them before he made his "inquiry" in THE LANCET, you and your readers will be able to judge whether or not Mr. Folker's "good feeling" towards a professional brother is shown by his anonymous writing, and also whether his peculiar mode of obtaining information is quite creditable to him.

Now the state of the case is this:—I received a telegram from Shelton, in the Potteries, signed "G. Moore," to attend and state if any deformity existed likely to interfere with a lady's confinement, which was hourly expected; and having consulted Churchill's Medical Directory, I found two persons of the name of "G. Moore," one residing at Hanley, and the other at Shelton; the latter, from the dates of qualification, appearing to be the senior practitioner. I accordingly lost no time in proceeding to the Stoke station on my way to Shelton; but on arriving at the Stoke station I was met by Dr. G. Moore, who, it appeared, had sent me the telegram, and was said to be practising homœopathy. Seeing this, I immediately pointed out to him the awkward position in which I was placed, when he stated that he had not ascertained the particulars of the case himself, but had telegraphed at the desire of the family, and I was to take the case upon myself, and to state my views to them; and upon this understanding it was that I went with Dr. Moore to the house, where I examined the lady, and then told the family there was no cause for alarm, and that any competent person could manage the case; but as for "entirely agreeing with his (Dr. Moore's) treatment," *as he had not treated the case*, there was none for me to approve. There was, however, some teasing ineffective pains, for which I simply ordered two grains and a half of opium (an allopathic dose), and left the house, not being there many minutes. I then drove direct to the railway station, and never left the cab till I got there, returning by next train to Manchester. Permit me also to say I did not call on Dr. Moore, and never having been inside his house, I could not have taken tea with him there, nor made the acquaintance of Mr. Folker's "parlour maid," who certainly never waited upon me, unless she was disguised as a railway porter at the station.

Having made these statements, you and your readers will see I am entitled to a more full and candid apology than the one published; and I do hope Mr. Folker will in future have more respect for himself than listen to and act upon second-hand or hearsay reports such as he has given ear to, and especially the statements of "parlour maids" and such-like sources of information, for, however reliable they may seem in his own estimation, they are, to say the least of them, very unworthy a gentleman's attention.

In conclusion, I would observe that if Mr. Folker's friend, the "parlour maid," ever made such a statement as that to which he refers, it must have arisen from the circumstance of Dr. Walker (homœopath), of Manchester, having been called in to the same case subsequently to my visit, and taken tea with Dr. Moore before leaving Shelton, the maid mistaking Dr. Walker for me; and doubtless the expression of confidence in Dr. Moore was that of Dr. Walker. It seems plain therefore to me that the whole of this miserable and ungentlemanly attack upon me arose entirely from a cause best known to the gentleman who has taken so much pains to bring me before the public and damage me in its opinion. I now leave this "mare's-nest" of Mr. Folker and his friends, and would recommend them for the future to employ their time in studying the welfare of their patients, instead of listening to the tittle-tattle of every idle gossip coming in their way. I have yet, however, to learn that I could have acted otherwise than I did in the case, which was that of a lady suffering under great mental anxiety, and in all probability one of life or death.

I am, Sir, yours faithfully,

Manchester, Sept. 1862. CHARLES CLAY.

MEDICAL PARTNERSHIPS.

To the Editor of THE LANCET.

SIR,—In your journal of the 2nd of August appeared an article on Medical Partnerships. I cannot believe that the views therein expressed are in accordance with those generally entertained on that important subject, and as no one having greater authority appears disposed to enter the field of discussion, I hope you will allow me to break a lance with you.

The article in question professes to be an exposition of the law of partnership, especially as it applies to the question of return of premium in case of dissolution. It needs not, however, a critical eye to detect that it is intended to show, not what the law of partnership is, but what it ought to be, in the opinion of the author of the article; for it broadly states, that "the construction given by courts of equity to partnership for

terms of years is very detrimental to the interests of the selling partner."

I make no question that "it is very detrimental to the interests of the partner who has sold a share of his practice" to be obliged under any circumstances to "refund;" and I doubt not "the sting of the dissolution is that he has to pay back the greater part of the premium." He would doubtless be a wealthier, and, if conscience or whatever occupied its place allowed, a happier man, if he could keep the whole of the money in his pocket.

In dealing, however, with the law of partnership in its application to dissolution, it is not fair that the interests of the selling partner alone should be considered. The interests of the buying partner should have equal prominence, and the question should be, what are the equities of the case as between them.

I consider the article I criticize an *ex parte* one—as, in fact, the case of the senior *versus* the junior partner. With the object of restoring the balance, I shall devote myself to showing the injustice the junior partner would sustain if the views propounded were adopted by courts of equity.

The article then tries to prove that a senior partner who has received a sum of money for a share, ought not, however prematurely the partnership terminated, to refund any portion of it, unless he can be proved guilty of fraud. In other words, that if he received a sum of money for an introduction and an income stipulated to last ten or fourteen years, he should not be obliged to refund any portion of it, although the introduction and the income lasted only one or two years.

Now, I, on the contrary, maintain, as indeed courts of equity maintain, that whereas the consideration to be given for the money paid was an introduction and an income of ten or fourteen years' duration, there is in such case a "failure of the consideration, and a right to a return of premium consequently arises." Your article quarrels with the decision of courts of equity because they order the return of any portion of the premium, and, to make a case, builds a castle in the air for the occupation of the junior partner. I, on the contrary, quarrel with such decisions because they do not order the return of the whole of the premium, and I think I shall make it appear that even this will not always do justice to the junior partner.

To do this it will be necessary to consider cursorily the relative positions and advantages of the senior and the junior partner. The senior partner is, perchance, a man of twenty years' standing; he is of mature age and known professional experience; has probably ushered a great many of the patients into the world, and the patients generally are firmly and deeply attached to him. He lives in the house around which the practice has grown, and probably has possession of the contracts and appointments which often form the backbone of a practice.

In opposition is "a young man" who is, as you well describe him, "a perfect stranger, not only to the practice, but to the neighbourhood, and perhaps also to the county,"—whose character therefore with the patients mainly depends on the representations of the senior partner, who has become his sworn antagonist. What can a young man such as you describe do in one or two years, so as "to secure, in case of dissolution, a good share of those who were formerly the patients" of the man of twenty years' standing? You go so far as to say that "the new man may carry everything before him;" by what process I am utterly at a loss to imagine.

All the patients in a large practice cannot be ill in one or two years, and those who are ill are not likely to fall desperately in love with a young man, of whom they previously knew nothing, and who has come to see them a few times, perhaps very much against their wish; and as to the value of a mere personal introduction, the old family attendant being in opposition, I need scarcely say it is positively *nil*, and may even be a disadvantage.

The very fact of a man's having so large a practice as to require a partner, is proof positive that he is a man of tact, or ability, or both; and yet "the new man" is to carry off the bulk of the patients in spite of him!

Really, Sir, this must be a wonderful "young man" you have met with. I need, however, scarcely multiply words to expose the fallacy of the proposition you have started. Any one but a senior partner, against whose interests it would be to confess the truth, or the counsel who pleads for him, will admit that the "new man" will stand a very poor chance indeed in competition with the old-established practitioner, and that, unless he could in such case recover his premium so as to be able to start afresh elsewhere, he would, if entirely dependent on the practice he could retain, stand a very good chance of being pauperized.

A vastly important element, too, is the fact that the estimation in which the junior is held depends to a great extent on the character given him by his senior, for this operates most fatally against him after the partnership is dissolved.

Say a senior partner repents his bargain, finds his family perchance clamorous for the old position and the undivided income, and after one or two years seeks to rid himself of his bargain. A charge of incompatibility of temper can always be got up, and pleas of various kinds may be easily manufactured so as to accomplish the desired object.

Now, in such case, is it not likely, nay certain, that the senior partner will disparage the junior who has now become his antagonist? Will he not, either by open abuse or covert insinuation, prejudice him in every way in his power, leaving no stone unturned to bring back to their allegiance any of the patients who may have begun to show a preference for him?

Surely, Sir, you cannot think, after thus looking at both sides of the question, that the senior partner only requires protection from the injury he *may* sustain in case of dissolution. You cannot still think that where a premium is paid for a long introduction and a lasting income, and the introduction is thus abortive and the income a myth, the poor junior should be mulcted of his little capital, be obliged to practise in opposition where he has no chance, or else begin life again as an assistant. Depend upon it, if the views broached in your article were carried out, such would often be the fate of the junior partner.

The article draws comparisons between partnerships for terms of years and "partnerships-at-will."

Surely no man in his senses ever knowingly entered into a medical partnership at will, *and paid a sum of money for it.* It will be manifest to anyone who will give a thought to it, that the value of a medical partnership at will is absolutely nothing at all. What is the consideration? An introduction to patients which may last just as long as may suit the interest or caprice of the so called vendor! In case of a banking company, or any undertaking where capital is joined, and can be equitably divided in case of dissolution, it is a different matter. But surely a court of equity would come to the relief if a "selling partner" sought to construe a partnership, which could not have been so intended, to be one at will. A court of equity would, unless I am misinformed, order the return of premium, and award damages for the attempted breach of contract.

In order to make the true meaning and value of a medical partnership clear, I will compare the market value of successions and partnerships.

The premium for the entire purchase of a practice, with from six to twelve months' introduction, is, on the average, one year's purchase of the gross receipts. In such case, so all-important is the prevention of future opposition on the part of the vendor, a clause is invariably inserted, making him liable to a very heavy penalty if he practises for many years within a safe distance.

The premium for the purchase of a share is variable. If the junior is a man of good qualifications, and is to take the hard work of the practice, allowing the senior to keep his country box and take his ease, no premium will probably be demanded for a fair share of the earnings. But, if the partners are to work equally, two years' purchase of the share is the average price. So that as much would be paid for half the practice as for the whole of it in case of succession.

Now, what is it that makes the half share of the same value as the succession to the whole practice? The income will, in all probability, be considerably less, and the position inferior. Is it not that the partnership is more secure and definite; that the results of the work of two men are more than those of the work of one; that, although the prospects and position are less brilliant, the risks are fewer; *that, in fact, it affords almost a guarantee that a certain yearly income will be enjoyed for at least the number of years specified?* Yet if it be true that, in case of dissolution after one year, the premium for the share should be retained, *the junior would positively pay as much for his chances of success, with the incumbent in opposition, as if he had purchased the practice with one year's introduction, and was protected by penalty from such opposition.* On reconsideration, you surely cannot maintain that this is or can be just.

I do not speak without knowledge gained by experience. I have been the purchaser of a practice for less than one year's purchase, and with twelve months' introduction I succeeded in keeping the whole, and very shortly in increasing it. I do not hesitate to say, however—such was the hold my predecessor had—if he had practised at the end of the year in opposition to me, I should not have kept practice enough to find me bread

and cheese. And for this your construction of the law of partnership would have made me pay as much as for a handsome income; giving me the simple and not very pleasant alternative, either to live on the scanty bread and cheese, or try my luck elsewhere, minus my capital.

The senior partner, who sticks to the money, of course says, "Oh! you have a fine thing of it; you have been introduced, forsooth, to society, with which, in the natural course of things, you would never have mixed," (the bulk of the patients being perhaps railway porters and second-rate shopkeepers). "You have the chance of walking off with the greater part of the practice," (with the "aside," probably, to his dear friend the counsel, "Don't you wish you may get it!") "And, at the worst, you have a nice nucleus, in a first-rate neighbourhood, which is worth all the money."

A fine thing, certainly, to have spent all your capital, *in order to be elevated so much above your natural level;* and to have a "nice nucleus" in an expensive neighbourhood—say £100 or £200 a year, in a place where you and your family cannot possibly live on less than £400 or £500 a year.

Do you not think, Sir, that if the law of medical partnership, as applicable to dissolution thereof, were such as your article advocates, a premium would be placed upon fraud? That if partnership is to be dissolved on the ground of "incompatibility of temper," or any other flimsy plea of ready manufacture, and the premium to be entirely retained, the "*taking-in*" a junior partner will become a most eligible and easy way of "raising the wind"?

"*Selling* partner," indeed! The innocent, unwary, and unprotected poor junior would most likely be "*sold*" with a vengeance.

Fortunately, however, for junior partners and for justice, the tendency of courts of equity is in the opposite direction to that which the senior partner or his counsel sighs for. Courts of equity feel that the junior partner requires quite as much protection, nay more, than the senior partner; and by a recent act "a power is given to courts of equity to award damages to the party injured by the breach of any covenant, contract, or agreement, and such damages may be in addition to, or in substitution for, an order for specific performance." So beware, oh! ye "selling partners," how you treat partnerships evidently intended to last for many years as "partnerships at will." Beware how you trump up charges which you cannot substantiate, and manufacture pleas which will not hold water, in order to get rid of the bargain you repent. Depend upon it, instead of keeping the money you are so very fond of, you run a great risk of being made to pay more than you have received.

The article compares partnership to matrimony; allow me to assist in completing the analogy.

If, on marriage, the young lady, with a little fortune of her own, ran the risk of being turned out of doors in a year or two, minus character and fortune, *Mr. Punch* would scarcely need raise his paternal voice in the ejaculation "Don't!" Her own sense would surely lead her to avoid seduction and robbery. So, if a junior partner, after paying a sum of money for an introduction and an income stipulated to last ten or fourteen years, is to be liable to be discarded, minus character and money, after "one or two years," I need scarcely raise my voice in expostulation against what would very like turn out to be seduction and robbery.

His own instinct will surely teach him that he must avoid such fearful risks, and try his fortunes in a state of "single-blessedness." I am, Sir, your obedient servant,

September, 1862. A JUNIOR PARTNER.

CHLORINE, AND THE CHLORINE ACIDS IN SCARLATINA;

THEIR ACTION AS ANTIDOTES TO THE MORBID POISON OR VIRUS.

To the Editor of THE LANCET.

SIR,—Having read in THE LANCET for June 28th a paper by Mr. Conway T. Edwards on the treatment of scarlet fever by chlorine, and finding that gentleman has solicited the experience of other medical practitioners, I beg, in reply, to state that my attention has been given to the subject for some years past, and in March last I had the honour of reading a paper before the Southampton Medical Society, embracing the pathological action of chlorine and the chlorine acids in scarlatina. In that paper I pointed out the remarkable difference existing between the action of the chlorine acids and nitric and nitrous acids in that disease,—the former appearing to exercise a direct action upon the morbid poison, while the latter possessed no therapeutical effects. The conclusion which I drew from the cases under observation was, that the chlorine acids are to the morbid poison of scarlatina what the nitric and nitrous acids* are to typhoid fever. In my hands, these oxygen acids have proved the most valuable therapeutic agents in typhoid fever; but when they were given to patients labouring under scarlatina, or suppressed scarlatina taking typhoid symptoms, no beneficial effects resulted. On substituting, however, the chlorine acids for the oxygen acids, a favourable change took place, and the patients rapidly recovered.

Now, although I have treated cases of scarlatina on the same physiological and chemical principles by nitric acid, I have never reversed my treatment, in order to try the effect of the chlorine acids in typhoid fever; but I have found the chlorine acids in scarlatina, and nitric acid in true typhoid, take precedence of ammonia as therapeutic agents.

It may be necessary to state, that the observations which I have made were in the absence of cerebral symptoms, owing to the mineral acids being contra-indicated when such complications were present. Great care was also taken not to combine the acids with other remedial agents which tend to neutralize or mask their action; but a few drops of ipecacuanha† wine and syrup of poppies may be added to nitric acid, or to the hydrochloric, should bronchial or pulmonary complications require, without altering their action in a chemical point of view; and when tonic treatment is necessary, the acids may be combined with decoction of bark or quinine.

When nitric acid has been given to excess, the tongue becomes very red, and this is an indication for suspending its use, reducing the dose, or administering an alkali, such as carbonate of soda, to which should be added a little pure ammonia or sal volatile, to absorb the carbonic acid which may be disengaged.

The preparations of chlorine which I have given in scarlatina are those in ordinary use: the nitro-hydrochloric acid; the hydrochloric; and the preparation recommended by Dr. Watson, of chlorate of potash and hydrochloric acid, which mixture contains, I believe, euchlorine.

I have never ventured to give the solution of chlorinated lime or soda internally, though I have frequently prescribed one or the other in the form of gargle. Children who are unable to use a gargle should have their fauces syringed with dilute nitro-hydrochloric acid or the euchlorine mixture; but in mild cases the internal use of these remedies is sufficient, without having recourse to syringing.

The hypothesis which I have advanced relating to the property of chlorine as an antidote to the virus of scarlatina requires further observations and investigation; but it is nevertheless worthy of note that nitric acid should possess the most powerful decomposing property of morbid matter, and prove so efficacious in typhoid, while the virus or morbid poison of scarlatina does not appear to be acted upon by it, or even removed from the system by its physiological action.

I have frequently watched patients whilst labouring under typhoid fever, and observed the rapidity with which nitric acid has cleared away the dusky hue and brightened the countenance, by decomposing the morbid poison of the blood. If that dusky hue depended upon the feeble action of the heart, it should be removed by the exhibition of ammonia, which acts as a stimulant. On the contrary, however, I have seen the dusky hue of the face increased by it, owing probably to the ammonia having an affinity for the morbid matter contained in the blood.

I once treated a case of puerperal fever by carbonate of ammonia, and the yellowish dusky hue of the face was evidently increased by it; the patient, however, rallied slowly under its influence, by acting as a stimulant, until nature could throw off the morbid poison. Now, although ammonia is a safe stimulant, it required in this case to be given with caution, and it was sometimes necessary to suspend it, and give the carbonate of soda drink as recommended by Dr. Rigby.

It is a question whether puerperal fever of a typhoid type might not be advantageously treated with nitric or nitrous acid; but the mineral acids are liable to disagree when given in the puerperal state, by causing the milk to dry up.

Mr. Edwards in his paper mentions milk diet in fever; I have not recommended it in scarlatina or typhoid; but in cases of small-pox, as a drink, it has proved very beneficial.

HENRY OSBORN, M.R.C.P. Lond.,
Southampton, Aug. 1862. Consult. Phys. Southampton Dispensary.

* Nitric acid containing nitrous, decomposes urea, and appears to possess this property when it exists in excess in the blood.

† The activity of ipecacuanha appears to be increased by mixing it with nitric acid, and the mixture frequently acts as an aperient.

EXTRAORDINARY CASES OF POISONING.

To the Editor of THE LANCET.

SIR,—Will you kindly permit me, through the medium of your columns, to lay before your readers the following somewhat singular cases of poisoning which came under my care?

On the 19th of August, a family of ten persons residing in this neighbourhood, having at dinner partaken of a rabbit-pie, were all shortly afterwards seized with diarrhœa and violent pains in the abdomen, which continued throughout the greater part of the night. Some astringent medicine having been administered, considerable relief was obtained. On the following morning, however, the precise cause of their illness not being suspected, several members of the family again partook of the remnant of the pie, reproducing the symptoms of the previous day in an alarmingly aggravated form, vomiting and violent cramps of the lower extremities being superadded.

Having been hastily summoned, I found on my arrival one of the patients in a state of collapse, pulseless, and insensible, and bathed in a cold, clammy perspiration. The others were also suffering more or less severely in proportion to the quantity of the poisonous food each person had eaten. Stimulants and opiates were promptly given, with immediate benefit, and under the treatment subsequently pursued, convalescence was soon established, though several days elapsed before they fully recovered from their exhausted and debilitated condition.

From inquiries instituted in the matter, it has been ascertained beyond doubt that these sudden and remarkable symptoms were attributable solely to the rabbit-pie, as each person who partook of it was similarly affected, and the symptoms recurred in every instance in those who again ate of it, whilst those who partook more sparingly of or avoided it escaped. The rabbits, and other materials composing the pie, it was proved were perfectly fresh and good, but were probably rendered unwholesome, though not unpalatable, by the process of cooking, having been baked beneath an impervious crust, which prevented the evaporation of the generated steam. It was afterwards permitted to stand for two or three days during very hot weather, which caused it to undergo a state of fermentation, as was observed from its peculiar appearance in the entire absence of jelly. Had the food been consumed when hot and freshly baked, or the confined steam freely permitted to escape by raising the paste, or otherwise affording sufficient ventilation, it is probable that no injurious effects would have resulted; at least such appears to me the only satisfactory explanation to account for the above remarkable symptoms.

I am, Sir, your obedient servant,

Brandon, Sept. 1862. JOHN BUCKENHAM, L.R.C.P. Ed.

POTASH IN SCURVY.

To the Editor of THE LANCET.

SIR,—Dr. Aldridge, of Dublin, has communicated to me the copy of a letter he has addressed to THE LANCET, in which he complains—but in most courteous terms—that, in speaking of the hypothesis that scurvy is caused by deficiency of potash in my address to the British Medical Association, I have failed to notice his title to priority in promulgating that doctrine; and he refers to various published writings in evidence of his claim.

I am sorry I spoke of the authorship of the suggestion without having informed myself more fully in regard to it. As at present situated, I have not the means of consulting the works referred to by Dr. Aldridge, nor can I presume to pronounce an opinion on any question that may have arisen between him and Dr. Garrod on the subject; still I feel it due to Dr. Aldridge to express my regret that I omitted, although, as he rightly supposes, unwittingly, to notice and do justice to his claim to priority in promulgating the doctrine in question.

I remain, Sir, your obedient servant,

Castleton of Braemar, Sept. 1862. W. SHARPEY, M.D.

CASE OF RETAINED PLACENTA.

To the Editor of THE LANCET.

SIR,—Perhaps you may deem the following case of placenta retained for sixty-two days after the birth of the fœtus worthy of publication:—

Mrs. ——, about four months advanced in pregnancy, miscarried in London on the 6th of May last. Some weeks after this occurrence—in consequence of a constant discharge, which caused her much annoyance, and was attended with considerable constitutional disturbance—she was advised to come to Margate for the benefit of sea-air and sea-bathing.

On the 7th of July I was called in great haste to see her, and found her suffering under severe uterine pain. After hearing her history of the case, I satisfied myself by the usual examination that the placenta was still in the uterus; and having expressed my opinion and ordered what I thought necessary, I was in a few hours gratified by its expulsion.

My patient made a quick recovery, and was well pleased at the happy result. In size the placenta was as big as a very large flattened hen's egg.

I remain, Sir, your obedient servant,

Margate, Sept. 1862. GEO. YEATES HUNTER, F.R.C.S.

PERFORATING WOUND OF THE SCLEROTIC, CHOROID, AND RETINA.

To the Editor of THE LANCET.

SIR,—With reference to the instructive case in the Middlesex Hospital under the care of Mr. Soelberg Wells recorded in your journal of Aug. 23rd, permit me to mention, that while assistant-surgeon in England, an instance came under my observation, which, though not so interesting as the one above alluded to, is yet, perhaps, worthy of notice, as it also tends to prove that very serious injuries of the eyeball may be completely, or almost completely, recovered from. The case I now advert to is that of perforating wound of the sclerotic, choroid, and retina, and also of the vitreous humour, which injury was sustained by a miner while working in a coal-pit. The man stated that his own pick-axe had entered the eyeball, owing (if my memory serves me) to the implement rebounding from the walls of the pit. The wound was a line or two behind the margin of the cornea, and a bead or nodule, consisting of vitreous humour, projected from it. An angular flap of the sclerotica (and the subjacent tunics?) had been driven inwards by one of the sharp ends of the axe; but, as I suppose, its elasticity had caused it to resume nearly its former position. The treatment which was immediately had recourse to consisted in the administration of opium and mercury, and the continuous application of anodyne lotions. Iritis, as was anticipated, occurred, but in due time it was subdued; the wound healed, and the eyesight was left very little, or not at all, impaired.

I am, Sir, your obedient servant,

Edinburgh, Sept. 1862. SOMMERVILLE OLIVER, M.D.

VACCINATION IN WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—During the spring of this year, pertussis prevailed epidemically amongst children in this parish and surrounding district. As several of them had not been vaccinated, I availed myself of the opportunity of trying the effects of vaccination as a remedy for that disease.

I selected ten cases of uncomplicated whooping-cough. A few days after its employment, I found the symptoms greatly mitigated—the severity of the cough was much lessened, and the intervals between the paroxysms were lengthened. In all the cases the disease progressed favourably, and was shorter in duration than it usually is by the ordinary method of treatment.

The ages of the children varied from three months to two years, and the time of employing it was about the third week of the disease. No medicine was used in any of the cases, with the exception of gentle laxatives. Vaccination as a remedy for whooping-cough was first proposed in Germany, and is not only practised in that country, but also in America.

About thirty years ago it was introduced into this country, and although favourably spoken of at the time, yet it was allowed to fall into disuse. Whether children so treated will enjoy an immunity from small-pox, I am unable to say; but I may mention that in three of the cases in which I attempted to revaccinate after the removal of the disease, the virus had no effect.

I am, Sir, your obedient servant,

R. C. RUSSEL, L.R.C.S.E.

Newmachar, Aberdeenshire, Sept. 1862.

NEW SANITARIUM FOR ENGLISH SOLDIERS IN INDIA.—The establishment of a sanitarium for European soldiers on the island of Caligouk, off the Tenasserim coast, has been commenced. Captain Fraser furnished the plan and details of the building.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

M. CLAUDE BERNARD is continuing his series of interesting communications upon the functions of the sympathetic; and at the last meeting of the Academy of Sciences treated of the phenomena produced by the section of the cervical sympathetic, and afforded proof of the independence of these from the vascular calorific phenomena of the head.

"In my first communication," says M. Claude Bernard, "I recalled the fact that Pourfour du Petit was the first to make known the effects of the division of the cervical portion of the great sympathetic on the eye. This author mentions as effects of this paralysis the contraction of the pupil, the diminution of the size of the eye, and the redness of the conjunctiva; but in all the experiments which were made afterwards, physiologists neglected to study the phenomena produced on the eye itself for the purpose of investigating the changes in the pupil, which were regarded as constituting the essential and characteristic symptoms of the division of this nerve. In 1845, M. Biffi, of Milan, added a fresh fact in announcing that when the pupil had been made to contract by the paralysis of the great sympathetic in the neck, the iris may be made to dilate by the application of galvanism to the upper end of the divided nerve. In 1851, MM. Budge and Waller designated under the name of 'cilio-spinal region of the cord' that portion whence arise the ciliary nerves. In 1852, I specially drew the attention of physiologists to the group of phenomena which arise from the division of the great sympathetic in the middle of the neck; and endeavoured to show that amongst the special results of this operation must be ranged the following:—1st. An augmentation of the temperature and vascularity of the corresponding side of the head, together with an increase in the sensibility of the parts. 2nd. A contraction of the pupil. 3rd. A retraction of the globe of the eye into the orbit, together with a projection forward of the eyelid. 4th. A flattening of the cornea, and a consequent diminution of the size of the eye. I showed, moreover, that when galvanism is applied to the upper extremity of the divided nerve, not only is a dilatation of the iris produced, but also an enlargement of the palpebral opening, as well as an exophthalmia. This tendency to dilatation of the palpebral opening, as well as of an exophthalmia, is so strong, that these phenomena occur even when a drop of ammonia is inserted into the eye of an animal, and whilst the organ is strongly closed during the paroxysm of pain which ensues. It must also be noticed that by this galvanic stimulation of the upper end of the divided nerve, a diminution or a total loss of sensibility is produced, at the same time that a narrowing of the vascular channels takes place. In the results consequent upon the section of the cervical sympathetic, it is important to distinguish two orders of symptoms. 1st. Those of a vascular and calorific character, dependent upon a modification of the vessels produced under the influence of sympathetic nerves of the same nature in all parts of the body. 2nd. Symptoms which I term oculo-pupillary, because special to the eye and pupil, and because produced by nerves distinct from the first. I have in the following way demonstrated by experiment the existence of this distinction. I commenced by seeking to define the exact site of origin of the oculo-pupillary nerves from the spinal cord, and, after many investigations, ascertained that in the dog the anterior roots of the two first pairs of dorsal nerves specially furnish these branches. When these two first pairs are divided within the spinal canal, not only is the contraction of the iris produced, but likewise the whole group of phenomena noticed as occurring in the eye on the division of the sympathetic in the neck; consequently this portion of the cord furnishes something more than the ciliary nerves, and would be more fitly termed oculo- than cilio-spinal. When subsequently the galvanic stimulus is applied to the cut peripheral extremity of one or other of the two first dorsal roots, precisely the same phenomena are produced in the eye as occur on galvanizing the cephalic end of the sympathetic after section of its cervical portion—that is, dilatation of the pupil, enlargement of the palpebral opening, and a marked exophthalmia. It is necessary to observe, that the section of the two first dorsal roots produces oculo-pupillary phenomena without causing the augmentation of heat and vascularity noticed in the other case. An essential condition for the success of the experiment is that only the two first pairs of dorsal nerves should be divided, and that neither the cord nor the first thoracic ganglion be wounded. It is most important to establish what the distinctions are which take their rise in such physiological properties, and we shall see that the oculo-pupillary and vascular nerves differ entirely in their reflex functions. Those reflex actions which produce movements of the eye or of its pupil, may have their starting-point anywhere in the peripheral surface of the sensitive nervous system, whether without or within. When the sensitive nerve of any region whatever of the body is irritated, be it a branch of the sciatic or of the trigeminal, there is at the moment when pain is felt a reflex movement bearing simultaneously upon both eyes, and producing sudden enlargement of the palpebral opening, and dilatation of the pupil. It is clear that, whatever the starting-point of the stimulus, it can reach the oculo-pupillary nerves which originate in the two first dorsal pairs through the spinal cord alone. That this is true, may be proved by dividing the dorsal pairs of nerves, when no reflex movement will occur in the pupil of the eye on the corresponding side; but if a single oculo-pupillary root remain, it is sufficient for the transmission of the reflex movement to the pupil. When the spinal oculo-pupillary nerves are intact on both sides, the reflex stimulus acts on both eyes simultaneously, whether the stimulus be applied to the right or left side. When the nerves are intact on one side only, the reflex action is expressed on one side only—namely, in the eye of the uninjured side, without reference to the locality in which the stimulus is applied; proving clearly that the reflex influences upon the eye are general and crossed. Lastly, when these nerves are cut on both sides, no reflex action whatever is produced. The reflex actions which occur in the vaso-motor nerves are characterized by a temporary narrowing of the vessels, which is followed by their subsequent dilatation and the occurrence of calorific phenomena. These vascular reflex phenomena differ from those which exist in the oculo pupillary system. The reflex actions in the former case are not crossed. If the ear of an animal is pinched, the vessels, after undergoing a sudden diminution of calibre, dilate, and increase of temperature is produced. The same result follows a simple section of the auricular nerve. Some physiologists have been mistaken in confounding such reflex calorific phenomena with the direct effects due to the section of the vaso-motor filaments. This error it is easy to demonstrate. First of all, the increased heat which results from the section of the trunk of the auricular nerves is evanescent, lasting rarely more than twenty-four hours, whilst that occurring after the section of a vaso-motor nerve lasts indefinitely; and, moreover, when the divided peripheral extremity of the auricular trunk is galvanized, the ear being at its highest point of vascularity, no contraction of the vessels is produced, as is the case when the upper extremity of the great sympathetic is divided."

Dr. Cutter is at present in Paris experimenting with his preparation of veratrum viride in the Hôtel Dieu and la Charité, where both MM. Trousseau and Piorry have placed patients at his disposal. So soon as these Professors have decided upon the merits of the American drug, I shall transmit their verdict.

Paris, Sept. 9th, 1862.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 4th inst.:—

Hacon, Richard Dennis, Bedford.
Marshall, Walter Thomas, Birmingham.

SUN-STROKE.—More than fifty persons died of sun-stroke in the city of New York during a few days.

UNIVERSITY OF GLASGOW.—We learn that Dr. W. T. Gairdner has been elected Professor of Medicine. No choice could command greater professional respect.

METROPOLITAN FREE HOSPITAL, DEVONSHIRE-SQUARE. Two wards will shortly be opened in this hospital for the reception of Jewish patients.

SIMULATED DISEASES.—The Russian Government have ordered that a division of the Military Hospital at Kiew shall be devoted to the detection of simulated diseases.

OAKUM LINT.—Dr. Sayres, surgeon to the Bellevue Hospital at New York, states that he has for many years given a decided preference to oakum over the ordinary lint.

MEDICINE IN THE COLONIES. — Dr. P. E. Sutherland, Surveyor-General of the colony of Natal, has taken a seat in the Legislative Assembly as Colonial Treasurer.

PATENT MEDICINES, which ten years ago contributed only £37,233 to the revenue, supplied £46,237 last year. More shame to the Government!

DR. FORSYTH, late Principal Inspector-General of the Medical Department of the Bengal Army, has just been appointed Member of the Civil Division of the Third Class, or Companions, of the Most Honourable Order of the Bath.

OPIATES TO CHILDREN.—A member of the Nottingham Town Council states that he sells about four hundred gallons of laudanum annually, at least half of which he believes to be administered to infants.

ST. THOMAS'S HOSPITAL. — The sale of the fixtures and materials of St. Thomas's Hospital commenced on Monday morning last, preparatory to its removal for the Charing-cross Railway Company. The works for the new hospital in Surrey Gardens are making rapid progress.

SIR CHARLES LOCOCK, who has been staying at the palace of the Crown Prince of Prussia since the accouchement of the Crown Princess, has left Potsdam for London, her Royal Highness having so far recovered as to render his presence no longer necessary.

MORTUARY RETURNS FOR TEN YEARS.—The Registrar-General is preparing mortuary returns for ten years, with such distinctions of age and sex and classification of causes of death as may enable us to estimate how far each district of England is affected by the several chief kinds of morbific influence.

INFANTICIDE IN THE METROPOLIS.—At an inquest held by Dr. Lankester at Islington on Monday last, he remarked that he held inquests almost daily on new-born infants, a large proportion of whom had met death by violent means. The evil calls for most rigorous measures for its suppression.

WATER IMPURITIES.—The impurity in the water of the West Middlesex Water Company in July, 1861, amounted to 16·56 gr. per imperial gallon; in July, 1862, it was 17·52 gr. The water of the Grand Junction Water Company for the same periods contained 17·28 gr. and 17·60 gr. respectively.

THE LATE PROFESSOR TRAILL.—The last edition of the Encyclopædia Britannica owes much of its excellence to the indefatigable exertions of Dr. Traill, its editor. More than four hundred of its articles were written by himself, while he carefully examined and made important corrections in the whole work.

VACCINATION FOR DISTEMPER IN DOGS. — A correspondent in the *Field* says that the only means he has found efficacious is to saturate a piece of worsted thread in vaccine lymph and draw it through the ear with a needle, and leave it there, cutting off the superfluous part of the thread.

NOXIOUS VAPOURS. — Lord Derby's Bill on Noxious Vapours is just published. The chief provisions are—that the Smoke Prevention Act should be made of general application; that gas emitted in manufacturing processes should be treated as furnace smoke; and that sanitary inspectors should have free access to all works.

BIRMINGHAM AND MIDLAND EYE HOSPITAL. — This hospital has just been removed to the extensive premises hitherto known as Dee's Hotel. The funds for the purchase have been provided by subscriptions. During the forty years' existence of the hospital more than a hundred thousand patients have been received.

EATING BELLADONNA BERRIES. — At the University Botanic Gardens at Cambridge, on Saturday last, some children gained admittance to the Physic Garden, having eluded the superintendence of their friends, and ate some of the berries of the Atropa Belladoona. Violent symptoms soon presented themselves, but happily the children recovered.

MUNIFICENT BEQUESTS. — The late Mrs. Douglas, of Orbiston, has, amongst other charitable bequests, left £500 to the Edinburgh Lunatic Asylum, £500 to the Glasgow Lunatic Asylum, £250 to the Edinburgh Infirmary, and £250 to the Glasgow Infirmary.—Mr. John Henry Parker, of Lincoln's-inn-fields, lately deceased, has bequeathed to medical charities the following liberal sums,—namely, £500 to King's College Hospital, £500 to the Royal Berkshire Hospital, and £300 to the St. John's Training Institution for Nurses.

THE SALARY OF THE CORONER FOR THE CENTRAL DISTRICT OF MIDDLESEX.—At the late meeting of the Middlesex Magistrates, held at Clerkenwell, a memorial was presented by Dr. Lankester, Coroner for the Central District of Middlesex, calling attention to the unfair amount of salary awarded to him in lieu of fees by the Court. Comparing the number of inquests with the salary apportioned to each district, it will be seen that whilst a sum of £2 1*s.* 3*d.* is provided for each inquest in the western division, only £1 7*s.* 9*d.* is allowed for each inquest in the central district. Dr. Lankester submits that £1370 be the minimum salary to which both in equity and precedent the Coroner for the central district is entitled. A short discussion ensued upon the Coroner's memorial, the matter being finally referred to the Committee for Accounts.

CHOLERA IN THE UPPER PROVINCES OF INDIA.—This disease has assumed a character very nearly approaching to that which it exhibited last year at Gwalior and Allyghur. It has been considered necessary at those stations to take measures for moving the European troops from the barracks and encamping them under canvas. The disease is also spreading in other parts of the country, and has broken out fiercely in the town and cantonments of Peshawur.

TURKISH MILITARY SURGEONS. — As a rule they are not an attractive set. Almost invariably Constantinopolitans, they jabber execrable French fluently enough, and affect European manners in a way which is truly disgusting; add to this a natural disregard of cleanliness and an obtrusive familiarity, and nothing more is wanted to complete the picture. ..... I felt inclined to attribute the singularly small amount of sickness in the camp more to fortuitous circumstances than to the *ars medendi* as practised by these ingenuous young men.—"Hurzgovina," by Lieut. G. Arbuthnot.

ARMY MORTALITY.—A comparison of the rates of mortality in the various European armies shows the satisfactory condition of the British army in this respect, in consequence of the late improvements. Out of 10,000 men, the mortality is in the Russian army, 390; Austrian, 280; French, 190; Piedmontese, 160-170; English, 150; Belgian, 143; Prussian, 70; and in the Danish and Saxon armies about the same rate prevails. Considering, however, the superiority of food and clothing in the British army, its sanitary condition admits of considerable improvement.

UNWHOLESOME WATER IN MARYLEBONE.—Complaints having been made by the inhabitants of Wigmore-street of the unwholesome condition of the water, it has been examined by Dr. R. D. Thomson, the medical officer of health, and found to contain a quantity of dead organic matter, covered with animalcules. On examination of the main, a volume of gas was discovered, which had probably entered from the supply-pipes, which are frequently in too close contiguity, and from which it was escaping in large quantities. The recent Gas Act is most ineffectual in its provisions to protect the public against the contamination of the water supply.

TESTIMONIAL.—A large number of the friends and agents of the Briton Life Association assembled at the Freemasons' Tavern on Monday evening, for the purpose of presenting a testimonial to Mr. John Messent, the Secretary of the Amalgamated New Equitable and Briton Life Assurance Office. The presentation was introduced by a dinner. The testimonial consisted of a very elegant silver tea and coffee service, and tray, manufactured by Messrs. Elkington and Co., of Regent-street, and a most valuable silver inkstand, supplied by Messrs. Savory and Co., of Cornhill.

PRIZES OF THE ROYAL COLLEGE OF SURGEONS.—The subject of the Collegial Triennial Anatomical Prize of the Royal College of Surgeons of England, value fifty guineas, is announced to be,—"The Structural Anatomy and Physiology of the Lymphatic Vessels and Glands (the anatomical distribution not being required); the communications (if any) between the lymphatics and the bloodvessels to be demonstrated; and the influence (if any) which the lymphatic vessels or glands exercise on the fluids they transmit, to be elucidated. The dissertation to be illustrated by preparations and drawings."

There are two Jacksonian Prizes for the present year, value twenty guineas each, the subjects of which are:—1. "The Relative Value of the Treatment of Popliteal Aneurism by Ligature and by Compression, illustrated by a reference to cases." 2. "The Healthy and Morbid Anatomy of the Tonsils, and the appropriate Treatment of their Diseases; illustrated by preparations and drawings."

The Jacksonian Prizes for 1863 will be:—1. "The Pathology

and Treatment of Diseases of the Larynx; the diagnostic indications to include the appearances as seen in the living person. The dissertation to be illustrated by drawings and preparations." 2. "The Normal and Pathological Anatomy of the various Synovial Bursæ connected with the Muscles and Tendons of the Upper Extremity, and the Treatment of their Diseases. The dissertation to be illustrated by preparations and drawings."

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, SEPT. 6TH.—The deaths in London in the week that ended last Saturday numbered 1179. If the deaths from epidemic cholera in the thirty-sixth week of 1854 are excluded from the returns on which the calculation is based, it will be found that the average rate of mortality in the first week of September in ten years (1852-61), gives 1160 deaths; and that the deaths now returned are not much in excess of the estimated number. The deaths from measles rose from 40, the average of the two previous weeks, to 58 in the last week. This disease appears to be much more prevalent in the Eastern districts, and especially the neighbourhood of Bethnal-green, than in any other portion of the metropolis. Scarlatina was fatal in 77 cases. There were 54 deaths from typhus, a number which exhibits a decline on those of some previous weeks. Diarrhœa continues to decrease; it rose to its maximum, 123, in the third week of August, and fell to 83 last week. Two-thirds of this latter number occurred in the East and South districts. Besides those from diarrhœa, 11 deaths, of which 9 were those of infants, were referred to cholera and choleraic diarrhœa.

The births were—boys, 922; girls, 905; total, 1827.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·702 in. The reading rose to 29·91 in. on Sunday, and fell to 29·48 on Wednesday. The mean temperature of the air in the week was 57°, which is 1·5° below the average of the same week in 43 years (as determined by Mr. Glaisher). The highest day temperature was 71·9° on Tuesday; the lowest night temperature was 45·6° on Friday. The range of temperature in the week was therefore 26·3°. The mean daily range was 18·8°. The difference between the mean dew-point temperature and air temperature was 6·1°. The mean degree of humidity of the air was 82, complete saturation being represented by 100. The wind blew from the north-east till Tuesday afternoon, from which time it was in the south-west. The amount of rain in the week was 0·39 in., a great part of which fell on Wednesday; smaller quantities fell on almost every other day. The mean of the highest temperature of the water of the Thames was 63·7°; the mean of the lowest was 61·5°.

MEDICAL VACANCY.

A MEDICAL Officer is required for the Kirton District of the Boston Union.

MEDICAL APPOINTMENTS.

MR. J. F. GRAY has been elected one of the Surgeons of the Royal Victoria Dispensary, Northampton, vice Mr. C. Dodd, deceased.

Mr. J. H. Evans was recently appointed Junior House-Surgeon and Apothecary to the Southern Hospital, Liverpool, vice Mr. Starke, promoted to House-Surgeon; but Mr. Starke having been obliged to resign on account of ill-health, Dr. T. G. Wollaston has been appointed House-Surgeon in his stead.

Mr. W. Eddowes has been appointed House-Surgeon to the Salop Infirmary, Shrewsbury, vice Mr. A. Provis, resigned.

Dr. W. Park has been appointed House-Surgeon to the Royal Infirmary for Women and Children, Waterloo-road, vice Mr. J. H. Stedman, resigned.

Dr. E. A. Kirby has been appointed Physician to the City Dispensary, Queen-street, Cheapside, vice Dr. W. A. Smith, resigned.

Mr. J. W. Williams, of St. George's Hospital, has been appointed House-Surgeon, and Mr. C. F. Bullmore, Apothecary, to the Male Lock Hospital, Dean-street, Soho.

Dr. T. L. Brittain and Dr. T. H. Hughes have been appointed House-Surgeons to the Birmingham Lying-in Hospital and Dispensary for Diseases of Women and Children.

Dr. E. Shaw has been elected Medical Officer for the Union Workhouse at Redhill, Hendon Union, Middlesex, and also Medical Officer and Public Vaccinator for the Edgeware District of the same Union, vice Dr. C. Robinson, resigned.

Mr. M. H. Clayton has been appointed President of the Birmingham Medical Benevolent Society; and Dr. W. F. Wade and Mr. T. W. Williams have been appointed Vice-Presidents. Mr. O. Pemberton has been appointed one of the Directors, and Mr. S. A. Bindley, Treasurer.

Mr. E. Goddard has been appointed House-Surgeon and Assistant-Secretary to the West Herts Infirmary, Hemel Hempstead, vice Mr. T. Wm. Colbeck, resigned.

Dr. H. Belcher has been elected Medical Officer and Public Vaccinator for the Gamlingay District of the Caxton and Arrington Union, Cambridgeshire, vice Mr. E. Harle, resigned.

Mr. J. Attfield has been appointed Director and Demonstrator of Chemistry and Pharmacy at the Pharmaceutical Society of Great Britain; and Mr. E. C. C. Stanford has been appointed Assistant Demonstrator.

Births, Marriages, and Deaths.

BIRTHS.

On the 31st of May, at Cathedral-square, Christchurch, New Zealand, the wife of Edward Batt, Esq., Surgeon, of a son.

On the 29th ult., at Loch Lomond House, Tarbet, Dumbartonshire, the wife of the late Robert F. Cullen, M.D., Surgeon, R.N., of a daughter.

On the 2nd inst., at Knaphill, Woking, Surrey, the wife of Dr. John Campbell, R.N., of a son.

On the 2nd inst., at Walmer, the wife of R. Staines Davey, M.D., of a son.

On the 4th inst., at Upper Tooting, Surrey, the wife of D. C. Noël, L.R.C.P. Edin., of a son.

On the 5th inst., at Addison-road, Kensington, the wife of E. Cooper Willis, M.B., of a son.

On the 7th inst., at Stafford-street, Edinburgh, the wife of Wm. R. Sanders, M.D., of a daughter, still-born.

On the 7th inst., the wife of Dr. Mansfield, Royal Naval Hospital, Plymouth, of a son.

On the 7th inst., at Malmesbury, Wilts, the wife of G. Salter, L.R.C.P.E., of a son.

On the 8th inst., the wife of J. Brendon Curgenven, Esq., M.R.C.S., of Craven-hill-gardens, of a daughter.

MARRIAGES.

On the 31st ult., at Haltwhistle, J. H. Buchanan, M.D., to Margaret, only daughter of Hugh Dryden, Esq., of Blenkinsopp Castle, Northumberland.

On the 4th inst., at Bishopwearmouth Church, David Easton, B.A., M.D., of Stranraer, Wigtonshire, to Maria Welthin, eldest daughter of G. W. Hudson, Esq., of St. Bede's-terrace, Sunderland.

On the 4th inst., at Halton Church, Hastings, Alexander Howard Page, M.D., of Devonport, to Matilda Louisa, eldest daughter of the late Edward Reading Robert Bucknill, Esq., of Rugby.

DEATHS.

On the 21st ult., at Hampstead, George Sawyer, M.D., aged 63.

On the 22nd ult., at Malta, John Joseph Adrien, Esq., L.R.C.S.I., Staff Assistant-Surgeon, Army, only son of the late John T. Adrien, Esq., Professor of Medical Jurisprudence, Royal College of Surgeons, Ireland.

On the 24th ult., Henry James Gunning, Esq., M.R.C.S., of Cloughton, near Scarborough, Yorkshire, aged 55.

On the 24th ult., at Dunse, James Stuart, Esq., Surgeon, R.N.

On the 30th ult., at Torquay, James Forbes, M.D., British Consul at Santiago de Cuba, aged 57.

On the 2nd inst., at Sunderland, Reginald Orton, Esq., M.R.C.S., aged 56.

On the 3rd inst., at Ramsgate, Wm. V. Stevens, Esq., M.R.C.S., of Milton House, Maude-grove, West Brompton.

On the 7th inst., at Keynsham-bank, Cheltenham, Anne, widow of the late Henry Fowler, Esq., Surgeon, aged 81.

BOOKS ETC. RECEIVED.

Mr. Grove on the Correlation of Physical Forces.

Catalogue of the Victoria Exhibition, 1861.

Medical Diary of the Week.

MONDAY, SEPT. 15	ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M. METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.
TUESDAY, SEPT. 16	GUY'S HOSPITAL.—Operations, 1½ P.M. WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEDNESDAY, SEPT. 17	MIDDLESEX HOSPITAL.—Operations, 1 P.M. ST. MARY'S HOSPITAL.—Operations, 1 P.M. UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
THURSDAY, SEPT. 18	ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 1 P.M. LONDON HOSPITAL.—Operations, 1½ P.M. ROYAL FREE HOSPITAL.—Operations, 1½ P.M. GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M. LONDON SURGICAL HOME.—Operations, 2 P.M. WEST LONDON HOSPITAL.—Operations, 2 P.M. ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
FRIDAY, SEPT. 19	WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
SATURDAY, SEPT. 20	ST. THOMAS'S HOSPITAL.—Operations, 1 P.M. ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M. KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M. CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£2	12	0
For every additional line	0	0	6	For a page	5	0	0

The average number of words in each line is eleven.

Advertisements which are intended to appear in THE LANCET of any particular week, should be delivered at the Office not later than on Wednesday in that week: those from the country must be accompanied by a remittance.

To Correspondents.

THE STUDENTS' NUMBER OF THE LANCET will be published on Saturday next, September 20th. Those gentlemen holding official situations connected with Medical Institutions in the United Kingdom, who have not yet forwarded the necessary information to our Office for publication in that Number, are earnestly requested to send it without the delay of a single post.

Pharmaceutist.—1. The method of Sir James Murray for extracting the active principles of various vegetable substances consists in using for a menstruum a solution of magnesia and camphor in distilled water, holding carbonic acid in solution instead of alcohol.—2. The tincture of cantharides has recently been given in America in drachm doses, and with good effects it is said. One of its eulogizers speaks of it in such doses as "an agent which in many cases of disease, at an almost helpless stage, will rally the scattered and almost dissipated vital forces, concentrate and generalize their action, and re-establish that series of atomic changes upon which vital action depends." This powerful tincture may be given so long as the urine is dense and of a darker colour than pale amber; but so soon as it appears pale, it will quickly become less in quantity, and strangury may follow. How far these views will meet with acceptance here has yet to be determined.

ARTIFICIAL TEETH.

To the Editor of THE LANCET.

SIR,—Can you or any of your numerous readers inform me if they have met with any cases of disordered health, and attendant symptoms of severe gastric irritation, from wearing the "red vulcanite" now so extensively employed as the basis of artificial teeth by dentists?

I have at the present time a patient under my care, who was supplied some nine months since with a set of teeth for the upper jaw, based on "red vulcanite," who has been declining in health and spirits ever since he has worn them! From being a strong, healthy, muscular, and robust man, he has been losing flesh rapidly, with loss of appetite, sickness, nausea, flatulence, gastric irritation, fetid breath, vertigo, diarrhœa, &c., apparently without any assignable cause. Seeing that he wore artificial teeth, I begged to be allowed to look at them, and it struck me whether there might not be something prejudicial in the *colouring* matter of the "vulcanite" which was keeping up his somewhat anomalous symptoms. I requested him to leave them off for a month (much against his inclination, as he never thought about his teeth having anything to do with his indisposition), and a marked improvement in all his symptoms followed. He has since resumed them, with a like result as before.

Not having met with any similar case, I should be glad of information on the subject—a very important one. I ought to state, perhaps, that the "vulcanite" is of the original *bright-red* colour, a bad imitation of the gums to what I have seen; but he only wears them during the day, and were supplied, I believe, by what would be considered a respectable dentist.

I am, Sir, yours truly,

Acocks-green, Birmingham, Sept. 1862. ENQUIRER.

Geo. Moore, M.D.—The controversy is between Dr. Clay and Mr. Folker. We cannot insert letters on the subject from any other person.

Erasmus Marley.—The lines, though witty and to the point, are libelous.

CONCUSSION OF THE SPINE.

To the Editor of THE LANCET.

SIR,—Mr. Skey, in his letter in your impression of last week, asks why concussion of the spine should so frequently occur as the result of railway collision, yet so seldom be met with in hospitals, consequent upon other forms of injury? The question has probably occurred to many. I answered my own misgivings thus:—In railway collision, the injury occurs while in the *sitting posture*, and *unexpectedly*; whereas in the great proportion of analogous hospital cases (as falls from a height), the concussion to the spine is to a great extent expended in the joints of some outstretched limb—perhaps, too, in its fracture. All the muscles, including those of the spinal column, are at the time in a state of tension. The frequency of comparatively trifling injuries following upon leaps from a great height, and the severe effects often resulting from an *unexpected* slip upon ice or orange-peel, are cases in point. In the one, the numerous joints, acting like buffers to a railway train, take off greatly from the force of the concussion to the part most distant from collision; in the other, the force is almost directly applied. Whoever has been "tripped-up" on ice will, I think, confirm my opinion that the whole frame is more "jarred" by an *unexpected* fall upon the buttocks than by a fall of equal force upon any other part.

I am, Sir, yours, &c.,

September, 1862. A GENERAL PRACTITIONER.

A Comparative Pathologist.—In canine rabies the stomach and intestines are found inflamed, and the former often contains a great quantity of rubbish, such as hay, straw, pieces of wood, gravel, &c., illustrative of one of the earliest symptoms of the disease—viz., a depraved and morbid appetite.

THE ARMY AND NAVY MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—As I think that but little is known about the internal economy of the public services in the medical schools, I take this mode of publishing, for the benefit of young medical men preparing to enter the service of the Queen, some of the worst points of the Naval Medical Service, and also of comparing it with that of the Army.

1st. A medical man joins the Navy. He is most likely appointed to a ship going to a foreign station, where he probably serves for from three to four years, and during that time he is perhaps never absent from his ship more than twenty-four hours at a time, or perhaps he may get three or four days now and then. Well, he comes home, his ship pays off, and he is placed on *half-pay* perhaps for two weeks, or, if he is lucky, he may get three months; but on no account does he get leave of absence on full-pay. The only officers who get full-pay leave are the favoured ones who are serving at home, and they get a month or six weeks a year. Now, this is a great injustice, for not only does it involve the loss of the additional pay, but, what is much more important, there is the loss of the time, only full-pay time counting for half-pay and retirement. I consider that when a man comes home from foreign service he ought to have a good spell of leave on full-pay, as the officers in the Army have. A marine officer, on paying off in a ship, generally gets three months' leave on full-pay, and perhaps when that is up he gets it extended.

Again, in the Medical Service of the Army a roster is kept for the regulation of foreign service. Thus, an assistant-surgeon comes home to-day from five years' foreign service, and he is put on the bottom of the list of assistant-surgeons for service again, so that the one who has been longest at home is the first for foreign service. By this means every one gets his share of home service. In the Naval Medical Service this is all regulated by *interest with the heads of the department*, so that one man serves all his time in sea-going ships, perhaps on a tropical station, while another just serves the time required by the Service afloat, and then settles down quietly in a dockyard, or in the Marines or hospital, or perhaps is kept changing from one to the other, that his name may not be down in the list too long to one.

The distribution of prize-money is another evil, where the surgeon (Army rank, major) shares with carpenters and boatswains, while the Army surgeon shares with officers of his own rank.

What we want then, more particularly is—1st, leave of absence on full-pay on returning from foreign service, say a month for every year served; 2nd, a fair division of home appointments, so that all may have the privileges of hospital practice, &c. And until something is done in this way, I should not recommend any man to join the Service.

I know instances of men going home after three or four years abroad, and being outward bound again in a fortnight. No wonder so many assistant-surgeons leave the Service after one commission, as they do.

I am, Sir, your obedient servant,

September, 1862. A NAVAL MEDICAL OFFICER.

Inquirer will find the information he seeks in a paragraph in the present number of THE LANCET.

Mr. W. Pitt could recover the charges for his visit.

CHOLERA IN INDIA.

To the Editor of THE LANCET.

SIR,—In reply to Dr. Macloughlin's letter in your issue of June 28th, 1862, I would request the favour of your inserting the following extract from a circular issued by the Inspector of Jails, Lower Provinces, in April, 1858:—

"With regard to the medical management of the sick, it is not perhaps necessary to say much. All preliminary diarrhœa should be carefully watched for, and the jailor and his subordinates be enjoined strictly to bring at once for treatment every instance of looseness that occurs among the prisoners. An experience of many epidemics on a large scale in this city (Calcutta) has convinced me that, in the absence of sound pathological knowledge of this mysterious and intractable pestilence, the empirical plan of warding off the tendency to death by general and local internal and external stimulants, with attempts to restore the functions of the liver and kidneys, is, on the whole, and in the long run when tested by the rigid proof of numbers, the most successful general plan of treatment that can be resorted to. The former is best accomplished by the application of heat and of rubefacients, with the internal exhibition of ammonia and diffusible stimuli generally. To check vomiting and relieve the burning thirst usually complained of, large draughts of water, as pure and cold as can be procured, I have found of most use. To act on the liver, small and repeated doses of calomel and soda are serviceable; and to restore the secretion of urine, cupping over the loins, with moderate doses of turpentine in mucilage, or, failing these, minute doses of strychnine, have most frequently in my hands produced the desired result. Both of the indications above mentioned I attempt as early as possible in the disease, with the view to prevent the occurrence of the secondary forms of typhoid congestion, dependent probably on the non-elimination of excrementitious matters from the blood, which are fatal to so many who pass safely through the active stages of the disease."

In conclusion, I would quote Dr. Morehead, in his "Diseases of India," (article, Epidemic Cholera, sec. 2,)—that the access of the disease is frequently in the night, often coming on without previous warning, but at other times being preceded by diarrhœa of longer or shorter duration—in support of my second statement.

As to the third statement, I can positively assert that in a jail where 9 fatal cases of cholera occurred in one month, there were in three months, taking the month before and the month after the occurrence, only 3 cases of diarrhœa; and in this jail the state of overcrowding was such that, allowing 500 cubic feet per man, 7 men were confined to a space that should have been devoted to one.

As to my fourth statement, I cannot conceive that any medical man would willingly allow diarrhœa, let it occur when it may, to go untreated.

Space will not permit me to say more than that I must still claim to be allowed to entertain the opinion expressed in my first letter, that Dr. Macloughlin's charge against Indian medical officers was both uncalled for and unfounded, and spoken *à cheval et en l'air*. Let our brethren judge.

I am, Sir, yours truly,

AN INDIAN MEDICAL OFFICER.

Chirurgus is, as regards the rule, correct. The Americans generally prefer sulphuric ether to chloroform; but Valentine Mott, we believe, forms an exception, and prefers chloroform to ether.

PROFESSIONAL RESPONSIBILITY AND RELATIONS.

To the Editor of THE LANCET.

SIR,—The important events to the medical profession which have transpired lately cannot fail to be viewed with the deepest anxiety, if we take into consideration the verdict of the jury in the case of Scott *v.* Wakem, or the evidence in the Clayton Tunnel accident, Williamson *v.* London and Brighton Railway. The intrinsic interest is more than usually impressive. It is not my intention to fill your columns with personal remarks in either case, as they are too well known to require further dilation by me; but, in accordance with my motive for addressing you, I would request your readers attentively to consider the summing-up of the Judge in both cases, and thereby acquit the jury of all sinister motives.

Throughout a long experience, I am satisfied that practitioners in medicine, and their opinions, are not much treasured by the bench or the bar, matters of fact having precedence to matters of science; and thus would the Lord Chancellor have thrown us overboard altogether in the Lunacy Bill had it not been for the timely assistance of Sir Benjamin Brodie. This fact, with many others, should place us on our guard, or at least caution us to preserve that union of mind and consistency of conduct and interests so indispensable to the right and satisfactory exercise of a useful and honourable profession. No one was more conscious of this, or strove to impress its truth and importance on a responsible, hard-working, and ill-paid scientific body, than the late Mr. Wakley. I remember his words—"There is a division in the camp, Sir, and as long as it exists you will become a prey to each other, and be taken advantage of by the public." Daily experience convinces us of its truth; but neither science nor intellect will at all times be our monitors.

It is imperative, however, under existing circumstances, that something should be done to protect us from the inflictions to which we are at present exposed; and I beg to submit, through your editorial influence, that a Protection Society be formed, and funds raised by subscription or otherwise from registered practitioners who would become members, and to whom assistance would be rendered, by the recommendation of a committee, in all cases where the integrity of the profession had been assailed, or individual honour impeached! Unless something of this kind be forthwith established, none of us can tell from what quarter we may be assailed. At all events our daily duties will be attended with less anxiety. Especially when the heads of the profession set us an example, like that we have recently witnessed in a court of law, what impression must be left on the minds of the public, or what safety or unanimity can exist, or dependence on those consulted?

The question is of too painful a nature to require further comment, and I am satisfied that the antidote rests entirely with ourselves, unless we tamely submit to the dominion of sceptical or senile intellects, the diota of a Medical Council, or homœopathic humbug. The useless and passive efforts of the one almost rival the impudence of the other. It is by these unequivocal monstrosities that we are surrounded, and no one feels sufficient interest, except yourself and your correspondent in Rome (whose letter appeared in your journal of the 30th ultimo), to step from the ranks to defend the noble army of martyrs, or to raise the profession from the polluted atmosphere by which it is surrounded.

I am, Sir, your ancient correspondent,
Pentonville, September, 1862. WM. SETH GILL, L.R.C.P. Edin.

Mr. Geo. Mack.—We think the answer of the Coroner gave the real reason why the medical evidence was required.

Mr. William Parker.—The description forwarded of "Condensation a new Principle in Surgery" is too vague to be intelligible.

POOR-LAW MEDICAL APPOINTMENTS.

To the Editor of THE LANCET.

SIR,—MAY I ask your assistance in preventing boards of guardians appointing men with only one qualification as medical officers when there are fully-qualified candidates for the office. Within the last three weeks, to my own knowledge, there have been two singly-qualified men appointed, and at each election there was *one*, if not more, thoroughly efficient and doubly-qualified candidate. In justice to the Poor-law Board, I must say that when their attention is called to such appointments before being sanctioned, they invariably quash them; but unfortunately the Poor-law Board never know that there have been fully-qualified men candidates unless their attention is called to the appointment by an unsuccessful candidate, the clerk of the union never forwarding to the Poor-law Board the names and qualifications of the unsuccessful candidates, but merely stating that Mr. So-and-so was elected medical officer for such-and-such a district.

I remain, Sir, yours, &c.,
A FULLY-QUALIFIED BUT UNSUCCESSFUL
Cambridge, September, 1862. CANDIDATE.

Graduate, (Edinburgh.)—There can be no doubt that he is entitled to do so by courtesy, and probably by law.

Dr. W. T. Jones.—We regret that the letter arrived too late for insertion this week.

SNEEZING, AND RHEUMATISM OF THE DELTOID.

To the Editor of THE LANCET.

SIR,—Allow me to give some information to your correspondents on these subjects.

I had a very severe affection of the deltoid for many months, which baffled all the remedies of the doctors and the Pharmacopœia, and rendered my left arm in a great degree powerless. A lady told me one day of the wonderful efficacy that scarlet flannel had been to her husband in a similar case. I accordingly had a piece stitched under my waistcoat next the skin covering the shoulder, and I am happy to say that in a few days a permanent cure was effected. I do not know whether the virtue lay in the dye or in the texture of the material, but certainly there is virtue in the article.

Respecting the case of sneezing, it appears to be a case simply of what is called hay-fever, which is very readily cured by quinine. My daughter is subject to similar attacks every spring, and is cured in the course of twenty-four hours by that remedy. Yours truly,
September, 1862. OBSERVATOR.

C. B. G. makes inquiries respecting the Day testimonial, and would be glad to know how it is proceeding.

A. A.—He is not entitled to a fee.

M.D.—1. Not necessarily with phthisis.—2. Probably some local application to the fauces and upper air-passages might be found useful.

THE UNIVERSAL PHARMACOPŒIA.

To the Editor of THE LANCET.

SIR,—In the year 1839, the late Dr. Michael Ryan published a work entitled "The Universal Pharmacopœia, or a Practical Formulary of Hospitals, both British and Foreign, including all Medicines in use," which was found of great utility to the student and practitioner of that day. Since then legions of new medicines have been brought before the profession; but how very few know their uses and doses! If therefore some able writer would publish a "Universal Pharmacopœia" in the style *à la* Ryan, with its practical formulary, he would be conferring an inestimable benefit upon a host of practitioners, while his labours would be requited from the extensive sale such a work must command. Your obedient servant,
Glastonbury, September, 1862. A RURAL PRACTITIONER.

HORNY EXCRESCENCES AND THEIR TREATMENT.

To the Editor of THE LANCET.

SIR,—If your correspondent, Mr. Mitchell, will, after "lopping off" the excrescences close to the base, touch them freely with caustic potass, he may probably find it successful. I have proved its value in a similar case. It is more than probable, on formation of the eschar, he will find at the root a small cyst or sac. Yours, &c.,
Cork, September, 1862. MEDICUS.

BETHLEHEM HOSPITAL.

To the Editor of THE LANCET.

SIR,—I observe by the rules of Bethlehem Hospital that the office of Resident Physician, which is now vacant, must be filled by either a *Fellow* or *Licentiate* of the College of Physicians in London, Edinburgh, or Dublin, or by a Doctor of Medicine of the University of Oxford, Cambridge, or *Edinburgh*; consequently Doctors of Medicine of the *London* University and *Members* of the London College of Physicians are excluded. Can you inform me the reason of such exclusion, and why so many of the best men in the profession are considered ineligible for this appointment?

I am, Sir, your obedient servant,
September, 1862. INQUIRER.

MEDICATED TOBACCO.

To the Editor of THE LANCET.

SIR,—Having a patient who is exceedingly anxious to try the effects of tobacco medicated with iodine in a case of rheumatism, I shall be greatly obliged if any of your readers will inform me where I could obtain a supply—whether in London or Paris. Any information regarding the use of the weed in this form would be esteemed a great favour.

I am, Sir, yours, &c.,
Glasgow, September, 1862. A GENERAL PRACTITIONER.

ERRATUM.—In Dr. Gaskell's letter, published in THE LANCET of August 30th, p. 240, col. 2, line 32, for "over," read "or to."

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Hancock; Dr. Chambers; Mr. F. C. Skey; Dr. Sharpey; Dr. Harley; Mr. J. Witchell, Mr. Edwardes, (with enclosure;) Mr. Crate, (with enclosure;) Dr. Moore; Dr. Dixon, Dover, (with enclosure;) Mr. J. Hollingsworth, Holmfirth; Mr. Carson, Bootle; Mr. Robertson, Bath, (with enclosure;) Mr. Binks, Wakefield; Messrs. Joy and Hoar, (with enclosure;) Dr. Waters, Liverpool, (with enclosure;) Mr. Evans, Ipswich; Messrs. Norman and Co.; Dr. Page; Mr. Parry, Nevin; Mr. Griffin, Weymouth; Mr. Sinton; Mr. W. Pitt, Willenhall; Mr. Langford, Horsham, (with enclosure;) Mr. Barnstaple, (with enclosure;) Mr. Sloper, Tredegar, (with enclosure;) Mr. Cheetham, Rochdale; Mr. Benson, Drumcollaher, (with enclosure;) Dr. Brigstocke, Aberystwith; Mr. Maugham, Navenby; Mr. Ward, Huddersfield, (with enclosure;) Mr. E. Bower, Manchester, (with enclosure;) Mr. Moss, Gravesend; Mr. Holland; Mr. Hicks, East Bergholt; Mr. Black, Glasgow; Mr. Salter, Malmesbury; Dr. Dewar; Mr. Goddard, Loughton; Dr. Macdonald, Portree, (with enclosure;) Mr. Bangua, (with enclosure;) Dr. Byrne; Mr. Carrington, (with enclosure;) Mr. Lowndes, (with enclosure;) Dr. Fisher, King's Lynn; Mr. J. Farmer, Brackley, (with enclosure;) Dr. Ogilvie, Boyndlie; Mr. Clarke, (with enclosure;) Mr. Moore, Hales Owen, (with enclosure;) Mr. Browne, (with enclosure;) Mr. Jones, Reading, (with enclosure;) Mr. A. Smith, Edinburgh; Mr. Southam; Mr. Anderson, (with enclosure;) Mr. Gunning, (with enclosure;) Mr. G. Hind; Dr. Glover; Mr. Henderson, (with enclosure;) Mr. M'Gowan, Trillich; Mr. Baker, Abingdon; Dr. H. Osborn, Southampton; Mr. H. Bird; Rev. W. Earle, Chigwell; Mr. Noble, Lymington, (with enclosure;) Mr. Parker, Bath; Dr. Mansfield, Plymouth; Dr. Gaze, Rome; Mr. Hordley, Etruria, (with enclosure;) Mr. Campbell; Mr. Walker, Wakefield, (with enclosure;) Mr. Cooper; Mr. Pennington, Liverpool; Mr. Walker, Glasgow; Mr. Hinds, Liverpool; Mr. Moorman, St. Colomb; Mr. Waite, Bury, (with enclosure;) Mr. R. G. White, Southampton; Mr. Lucas, Hitchin, (with enclosure;) Mr. Phillips, Guildford, (with enclosure;) Mr. Davies, Slough; Mr. Ravenscroft, (with enclosure;) Mr. Flinn, Liverpool, (with enclosure;) Dr. Day, St. Andrews; Mr. Russell, Newmachar; Mr. Renton; L. L., (with enclosure;) R. F., (with enclosure;) X. Y., (with enclosure;) Inquirer; Justitia; A Junior Partner; The Secretary of the Royal Maternity Charity; M.D.; Royal College of Physicians; A Pharmaceutist; A General Practitioner; C. F.; &c. &c.